FaciliWorks® 7

User Guide

FaciliWorks Enterprise Asset Management Desktop version 7

CyberMetrics®

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Maintenance Management Software

Version 7.0

Quick Start Guide

Chapter 1: Overview

FaciliWorks Maintenance Manager for Windows gives you all the tools you need to effectively track and schedule all of your maintenance tasks, personnel, equipment, and supplies. It is designed to be used by maintenance managers and personnel, as well as by tool crib, purchasing, accounting, and inventory professionals.

You have a variety of installation options with FaciliWorks. You can use it in a client/server environment, on a stand-alone workstation, or on a network, depending on your company's needs.

In FaciliWorks, equipment records store identification, warranty, and accounting information, as well as associated maintenance tasks. Each maintenance task record contains information regarding its schedule, estimated and actual time, costs, labor, personnel, tools, and parts required, in addition to the procedures and variables required to inspect, measure, repair, and replace equipment components.

You can create detailed work orders based on this information, coordinating the required items for each category with your available resources. You can also print detailed listings of all of your equipment and resources, filtered and sorted according to your preferences. It's also easy to generate and keep track of the service requests and contracts that are a part of each maintenance task. A part consumption report and a part reorder report facilitate inventory control. Useful graphs can be prepared for quick comparison of equipment downtime, maintenance costs, or inventory valuation. Other graphs illustrate employee performance and purchasing information.

FaciliWorks helps you coordinate purchase orders, staff, and supplier information, as well as your inventory and costs of tools, parts, and supplies. Powerful forecasting tools are incorporated into the program in the form of a visual calendar that shows the number of jobs

and hours for each day of the month, along with a projected schedule of tasks and hours, which can be summarized in several ways.

The program's interactive table design allows each part of the maintenance management process to become an independent component. These components are then combined, forming building blocks for the solid construction of your maintenance management system. Once you have mastered the basics, you will find that FaciliWorks is a vital software tool for analyzing, budgeting, and managing your maintenance program.

About This Guide

The *Quick Start Guide* will give you a look at how your company might use FaciliWorks on a typical day, and then it will help you quickly install and run your new program. This guide is intended for users who have a good working knowledge of the Microsoft Windows operating environment. You'll find more detailed instructions in the accompanying *User's Manual*. The *System Administrator's Guide* contains detailed installation instructions; it also shows you how to set up FaciliWorks and perform its advanced functions.

Chapter 2: How Do I Use FaciliWorks?

To answer this question, let's look at how your maintenance department might use FaciliWorks on an average day. Please note that this story is meant to illustrate FaciliWorks' features; it is not intended to dictate how you plan your work. In this story, the names of FaciliWorks' **features** and **reports** appear in **bold** type; names of *optional accessories* appear in *italic* type.

A Typical Day in the Maintenance Department

It's Monday morning: time to plan the day. You pour your coffee, turn on your computer, and start up FaciliWorks. The **Automatic Work Order Due** report pops up on the screen, showing all of the work orders that are due today. You print it out to use as a handy reference so that you can be sure that all of the required work is finished today.

Now it's time to organize the work for your maintenance crew. As the maintenance manager, you need to plan the week's schedule for your technicians. Thanks to FaciliWorks, it's easy to print a weekly **Work Order Schedule**. Then, because you have several technicians, and you have some pieces of equipment that must be sent off-site for maintenance, you print a separate **Work Order Due** report for each of these people or sites.

Along with each list, you include a printed **Work Order** for each piece of equipment that needs maintenance. The work order includes equipment information, maintenance records for the equipment, and the estimated maintenance hours. You've also been thorough enough to include the **Equipment Map** for each work order.

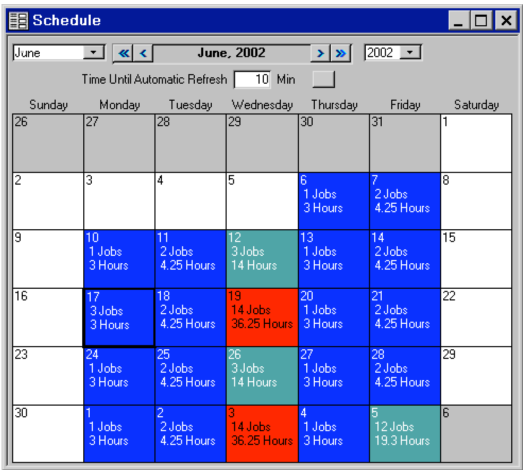
You've also added the **Task Detail** report to each work order. This report includes any required labor, contracts, parts, or tools, along with variables that should be checked, and a

list of the procedures required for each task. One of your technicians is new to the job, so you print out a detailed **Procedure Listing** for him.

Now you're ready to send your technicians off to work. One of them is going to a remote site and will be gone for several days, so you download his work order information to his *PDA (Personal Digital Assistant)*.

Now he'll be able to record all of the work order results on the *PDA*. When he returns on Thursday, you'll upload the information and update the maintenance records in your FaciliWorks database.

Later in the morning, you check to see how the work is progressing. You look at the scheduling **Calendar** to see how many jobs are left for the day and how many hours have been scheduled for each one. You also click on today's and tomorrow's dates on the calendar to view any unscheduled work orders and approved service requests, along with any incomplete work orders due on each day.

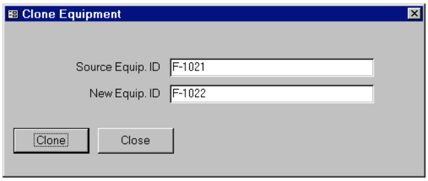


Now, the Receiving Department notifies you that they've received the new parts that you ordered. You enter these parts into FaciliWorks in the appropriate warehouse or storage location so that they'll be available for your work orders. Because the **Part Consumption Listing** indicates that you have been using more of one of these parts than you used last

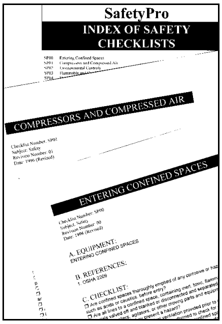
quarter, you increase the inventory level according to the **Part Reorder Calculation** report. You also decide to place this particular part on the **Critical Part Listing** to prevent any more downtime caused by a part shortage.

You're also concerned about your tool inventory. You control and track the usage of all tools through FaciliWorks' **Tool Issue** function, but your business is expanding, and you notice more and more that in addition to part shortages, sometimes tools aren't available when you need them. You compare the **Tool Issue History** report with the printout of the parts and tools that aren't available for next week's work orders and decide to purchase more of the most frequently used tools.

Next, you need to update FaciliWorks' database. Your company has acquired an additional piece of production equipment that is the same type as another piece of equipment that you already have. You use the **Clone Equipment** feature to copy the common information about this piece of equipment into a new equipment record. When you clone the equipment, all of its associated tasks and information, including task variables, procedures, labor, contract, part, and tool information, are copied to the clone. All you have to do next is enter the equipment's unique information, including serial number, purchase date, and next maintenance due date.



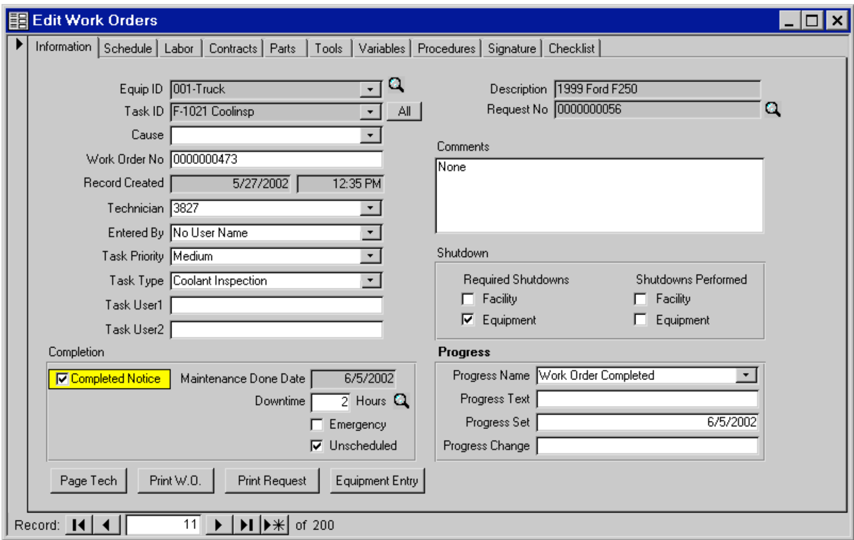
You'll need an additional safety procedure for this equipment, too. You use *SafetyPro*, a database of safety checklists that cover everything from fire protection to stairways and hand tools. Thanks to *SafetyPro*, you don't have to waste time researching or creating safety procedures. You can simply import the procedures directly into FaciliWorks. Using *SafetyPro* also helps your company comply with OSHA safety standards.



After lunch, you spend the afternoon doing some work orders yourself. Once you've finished, you use the *FaciliWorks Maintenance Label Kit* to print out maintenance labels for each piece of equipment. These laminated, durable labels are oil- and water-resistant, and they're easy to print and apply to your equipment.

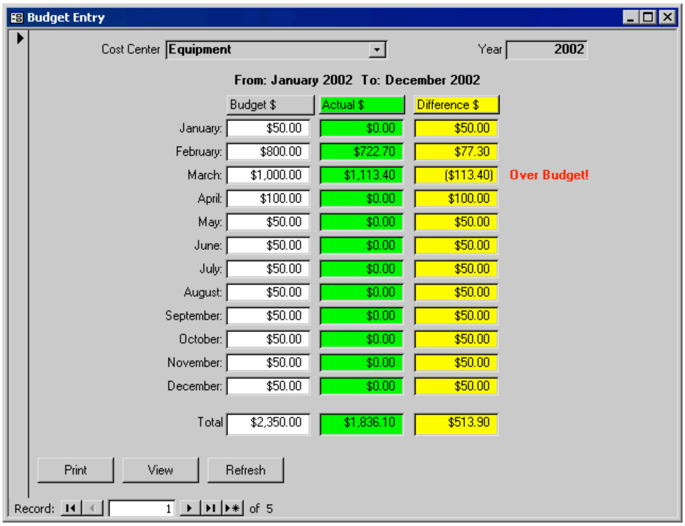
Later in the afternoon, you check on the tool crib again. Some tools used for work orders are being returned. An employee with a *Bar Code Reader* is quickly scanning the bar-coded labels on each tool. A second scan, across a department identification bar code, completes the tool return information.

Now, a **Pop-Up Service Request Notification** tells you that two new service requests have been entered. Employees in other departments have used their copies of the *Service Request Module* to enter maintenance requests. Thanks to the pop-up message, you know about these requests right away, and you can go into **Approve Service Requests** and decide whether or not you should approve them. You can then enter more information about each request, and create a **Work Order** directly from the service request record. Since one of the requests has an emergency priority, you use the **Page Tech** button in the **Edit Work Orders—Information** screen to page the technician that you've assigned to this work order.



As maintenance manager, you're responsible for budget and resource planning. FaciliWorks' powerful tools help you plan ahead. To obtain a historical perspective, for the last quarter and for the same quarter in the previous year, you print the **Work Order Costs and Labor** report several times, sorting by equipment, tasks, locations, and technicians, so that you can better analyze past use of resources. Using FaciliWorks' **Budget Entry** feature, you check your budget for each of the three months of the last quarter and the same quarter

in the previous year, comparing actual and estimated costs. FaciliWorks flags over-budget months so that you can easily recognize them.



As the final step, you print the **Work Order Schedule** by month, week, and day of the week to see where labor bottlenecks occur. You see that you can smooth out the workload by rescheduling some tasks. To help your technicians, you print out a detailed **Work Order Schedule by Day with Details** for each one of them so that they can plan their work for the next several weeks.

Next, you go to a managers' meeting. You're well prepared with your budget, schedule, and cost reports. You've also printed some graphs for your presentation, including **Equipment Downtime**, **Equipment Costs by Type**, **Employee Performance**, and **Inventory Value by Category**. You feel confident that everything in your department is under control—and these reports and graphs prove it.

After the meeting, it's time to go home. As you leave, you try to remember what your workday was like before you had FaciliWorks. How did you ever manage?

Benefits

As you can see, using FaciliWorks and its accessories saved you a lot of time, effort, and stress. Let's list each benefit by its corresponding FaciliWorks feature:

- As soon as you started FaciliWorks, the **Automatic Work Order Due** report told you exactly which work orders were due for maintenance today.

- Your **Work Order Schedule** helped you plan your week, along with the **Work Order Due** report, which gave you a printed copy of every work order that was due for maintenance this week.
- You were able to print the complete **Work Orders** that each technician needed to perform maintenance on each piece of equipment assigned to him/her. Because the **Work Orders** include task details, each technician had thorough information for each task, including procedures.
- The *PDA* gave the technician who was going off-site a faster, less cumbersome way of recording his work order information; when he returns, you will be able to upload this information into your database easily.
- FaciliWorks' **Calendar** makes it easy for you to check on the status of each maintenance task—without even leaving your desk!
- Thanks to the **Part Consumption Listing**, **Part Reorder Calculation**, and **Critical Part Listing**, you quickly determined which parts needed their reorder points adjusted, thus eliminating downtime due to part shortages. Without FaciliWorks, this task would require much more time, effort, and paperwork.
- Using **Tool Issue** and the **Tool Issue History** report, you were able to analyze which tools were used most so that you could order more of the popular tools, thus preventing future shortages. These features took the guesswork out of ordering and ensured that you knew exactly when and to what location each tool had been issued.
- The **Clone Equipment** feature also saved time. Without it, entering the new equipment's information would have been redundant and time-consuming. Also, because you didn't have to enter as much information, you were assured of more accurate and uniform data entry.
- *SafetyPro* provided you with proven safety procedures that were already researched and documented, and you easily imported them straight into your FaciliWorks program without having to enter them by hand.
- The *Maintenance Label Kit* helped you quickly print durable, easy-to-read maintenance labels for each piece of equipment you performed maintenance on.
- The *Barcode Reader* provided for fast, easy, and accurate entry of issued and returned tools, and even updated their current information—all directly into FaciliWorks.
- Thanks to FaciliWorks' **Pop-Up Service Request Notification**, you knew instantly when a maintenance request was made. And, because your company has a multi-user license of the *Service Request Module*, other employees could easily enter maintenance requests without leaving their

desks or picking up the phone—and you had all of the necessary information already entered into FaciliWorks' **Service Request—Information** screen. After that, it was easy to create a work order directly from the request, without phone calls or messy paperwork.

- With FaciliWorks' **Budget Entry** feature and other cost and scheduling reports, you conveniently documented information about your resources, including printed graphs to help you analyze your consumption and scheduling. You don't dread budget meetings anymore, because you know you can easily retrieve any necessary information from your FaciliWorks program—whether for a complex analysis or a quick overview.
- Finally, FaciliWorks' features and optional accessories helped you comply with your company's demands for high-quality, on-time maintenance. They also helped you ensure your company's compliance with ISO/QS/AS 9000, FDA, FAA, JCAHO, and other standards that require your maintenance program to be efficient and effective.

Chapter 3: Using FaciliWorks

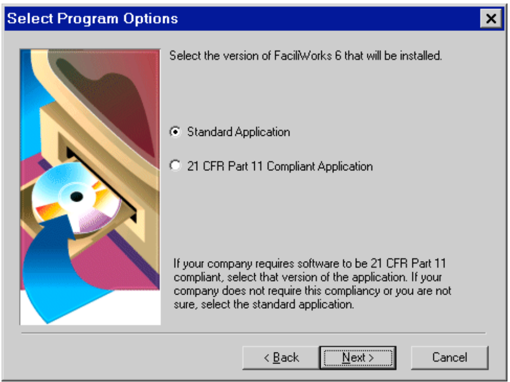
Now that you've seen what FaciliWorks can do for you, it's time to learn how to use it.

Installation

The *System Administrator's Guide* contains detailed information about different ways to install FaciliWorks and set it up on a network, including how to set it up in a client/server environment. For more information, see **Chapter 2: Installation**, beginning on page 231 of the *System Administrator's Guide.* However, if you'll just be using the program on one PC and installing it from the CD-ROM, follow these instructions:

1. Click the Windows *Start* button and select the **Run . . .** command.
2. Place the FaciliWorks Version 6 CD into your CD-ROM drive [D]. The installation program will automatically begin.
3. Follow the installation instructions on your screen.

Note: During installation, FaciliWorks will ask you if you want to install the standard application or the 21 CFR Part 11 application.



If your company is required to be compliant with 21 CFR Part 11, then you must install the 21 CFR Part 11 version of FaciliWorks. If your company is not required to comply with 21 CFR Part 11, then you can pick the Standard Application. If you are not sure if you are required to comply or not, select the standard version of the program.

Both versions are identical except that the compliant version requires security to be active at all times.

If you are installing the compliant FaciliWorks and do not have a database set up or if your existing database does not have any security set up, FaciliWorks will create a secure user. The name of this secure user is "Default" and there is no password. When you run the program, you will be presented with a login form. Enter the user name of Default **and you will be prompted to enter a password and confirm that password. Once you have done this, you will then be able to set up users and groups in the security form. For more information, see the section** Security**, beginning on page 283 of the *System Administrator's Guide.* After setting up other users, delete the Default user. If your database already has security set up, FaciliWorks will not add a user. In this case, simply log in as you have done in other versions of FaciliWorks.**

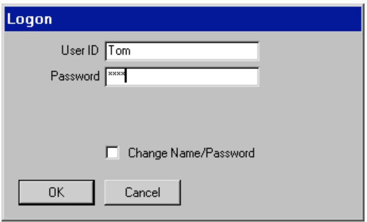
If you are installing the standard FaciliWorks, security is not required and no users will be created. You may set up security if you wish. For more information, see the section Security**, beginning on page 283 of the *System Administrator's Guide.***

Starting FaciliWorks in Windows 98

First, click the **Start** button. Next, select **Programs,** then the **FaciliWorks 7** program group, then choose **FaciliWorks 7.** The Main Menu will appear.

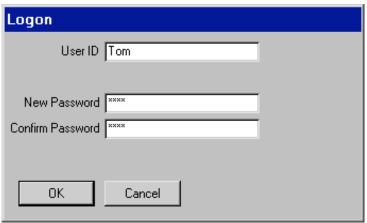
Logon

If your system administrator has set up system security in FaciliWorks, a logon window will appear as shown below when you start FaciliWorks. Enter your User ID and password, then click the **OK** button.



The first time you log in to FaciliWorks, you will see this message:

Click **OK**; enter your User ID, then enter a password in the **New Password** field and enter the same password in the **Confirm Password** field. FaciliWorks will require you to enter this password the next time you log in.



When you wish to change your password, click on the checkbox labeled **Change Name/Password** in the **Logon** window. FaciliWorks will require you to enter your old password, then enter and confirm your new password.

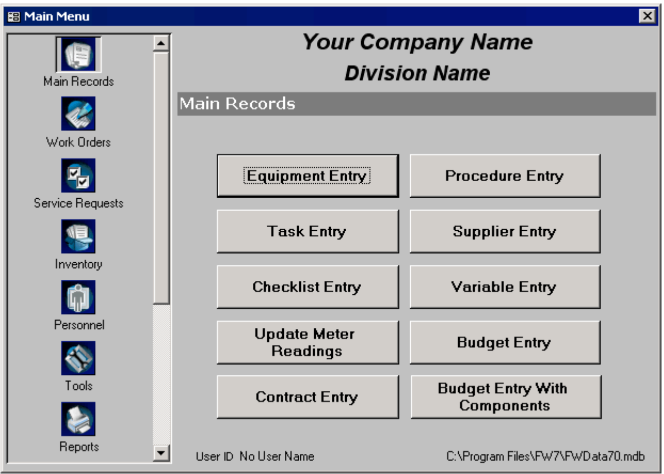
Serial Number

Until you enter your program serial number into the **About** window, a reminder message will appear whenever you open FaciliWorks. Click **OK**, and the **About** window will appear. In the

Serial No. field of this screen, enter the serial number for your copy of FaciliWorks (the serial number is located in your manual, on the packing list that came with your package, and on your registration card). If you can't find your serial number, please contact CyberMetrics Technical Support at (480) 922-7300.

Main Menu

Now you can see the entire Main Menu. The name of the currently logged-in user is displayed in the lower left corner. The full path to the attached database file, FWDATA70.MDB (FWSAMP70.MDB if attached to the Sample Database), is displayed in the lower right corner.

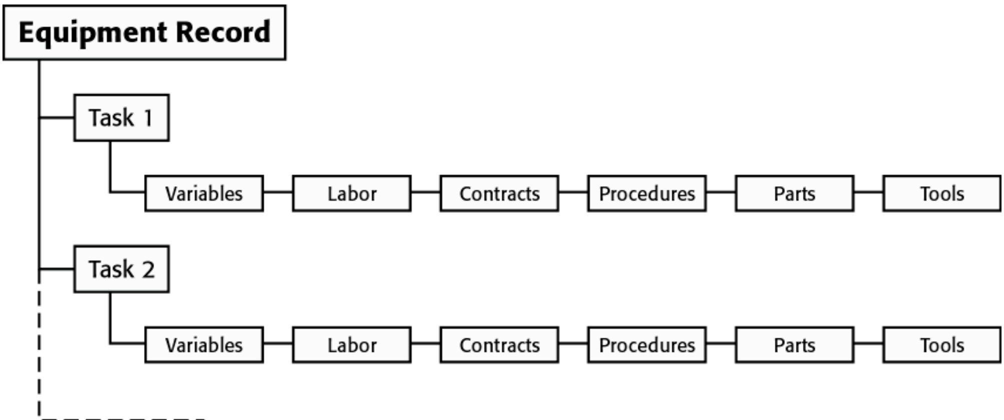


This table lists the menu buttons and functions that you will use in this guide. For a complete list of menu options, consult the *User's Manual*.

Menu Button	Options
Main Records	Equipment Entry Procedure Entry Supplier Entry
Work Orders	Auto Create Scheduled Work
Inventory	Part Entry
Personnel	Staff Entry
Tools	Tool Entry

Chapter 4: Entering Records

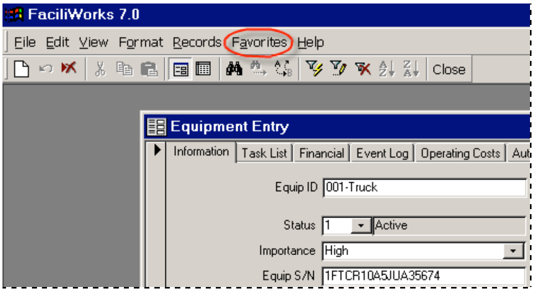
This diagram shows how records are arranged in FaciliWorks Maintenance Manager:



To help you get started with FaciliWorks quickly, so you can evaluate and use its major functions, this guide provides instructions for entering equipment information, including entering task information in the **Equipment Entry** window. As the diagram shows, tasks are linked directly to equipment, and other record areas (parts, tools, variables, etc.) are linked to tasks. By introducing you to **Equipment Entry—Information and Equipment Entry—Task List,** you'll be able to understand and use FaciliWorks' basic functions.

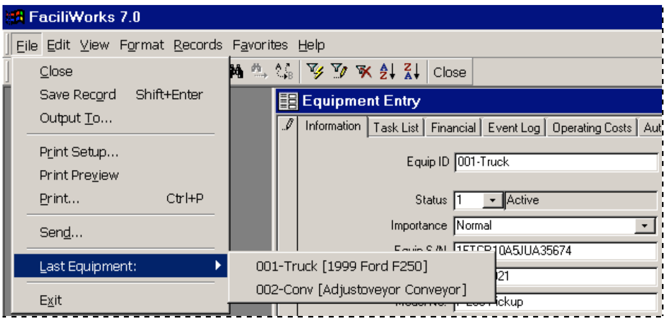
Equipment Entry

While this module lets you input new equipment data, it also stores all the information regarding your equipment. It allows you to bookmark records you frequently use or access as well, making it easy for you to find the data you need. To bookmark a record, simply access the **Favorites** option from the menu bar and add the record to your favorites. You can also delete records from the **Favorites** option, as well as organize records you have bookmarked.



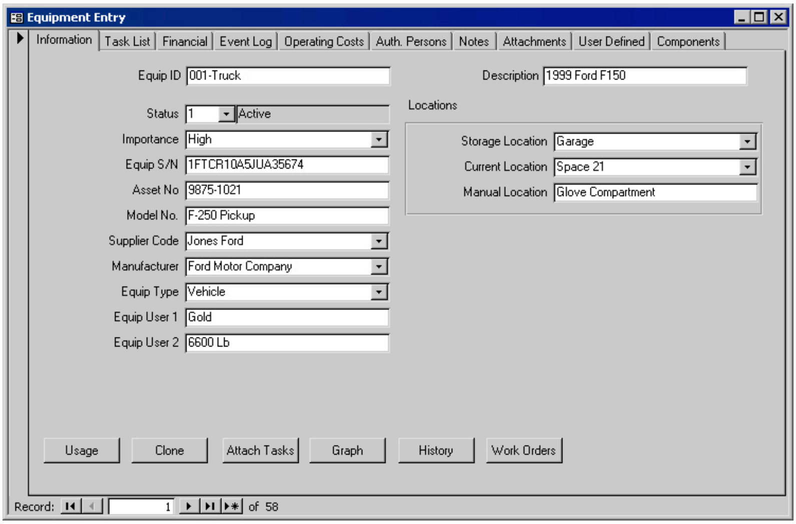
Note: The Favorites option is only available in the Equipment Entry and Edit Work Orders modules.

The Most Recently Used (MRU) feature of equipment list is found under the **File** menu. This functionality displays the last 10 records you edited, with the one on top of the list being the most recently changed or modified. In the example illustrated in the screenshot below, the last edited record is that of 001 – Truck (1999 Ford 250).



To enter equipment records, select **Equipment Entry** from the **Main Records** menu. The **Equipment Entry–Information** window will appear.

Equipment Entry—Information



Entering New Equipment

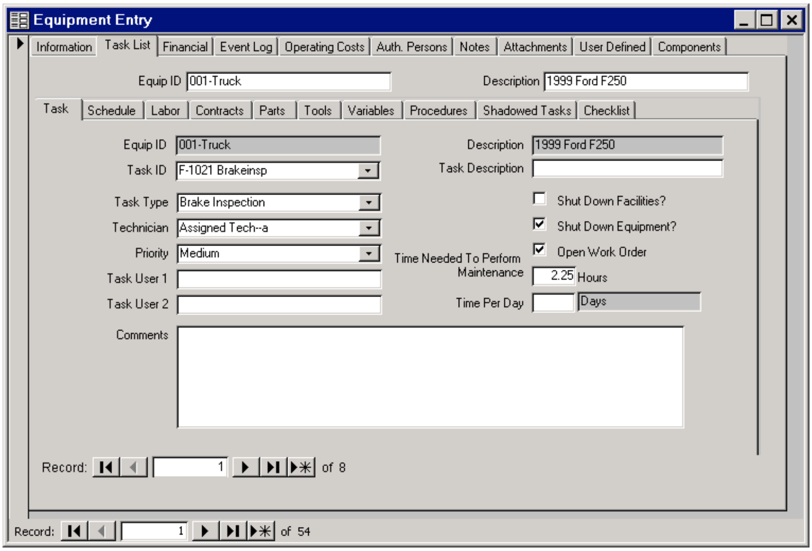
To enter a new equipment record, click the **New Record** button on the program toolbar. Use your mouse cursor or **TAB** key to move between fields in this window.

The main fields in the **Information** screen are explained in the table below:

Field Name	Description
Equip. ID	Enter a unique alphanumeric identification code for each equipment record. You must create a unique ID for each piece of equipment in order to store the record in your database **Important: Avoid using #, *, ?, !, ', or [ ] in your Equip. ID field or other fields, as FaciliWorks considers them to be wildcard characters (wildcards help you search and filter records). If you must use these characters, such as in "Boiler #1", then you must put brackets around the wildcard character whenever you use it to filter records (for example, enter "`Boiler [#]1`"). For more information on wildcards, please see the *Program Conventions* section of the *User's Manual*.**
Status	Assign a status to the equipment. Use the drop-down list to pick from available choices (1—Active, 2—In-Active). This field is required. **Important: If the Status field is *not* 1 (Active), the Maintenance Due reports will skip over this equipment, as they show only *active* equipment.**

Field Name	Description
Importance	Enter the equipment's priority rating or select a rating from the drop-down list to indicate how important the equipment is to your operations. When you enter a new priority type, FaciliWorks will add it to the drop-down list so you can select it when needed.
Equip. S/N	Enter the equipment's serial number.
Asset No.	Enter the equipment's asset number (usually issued by your accounting department.
Model No.	Enter the equipment's model number.
Supplier Code	Enter the ID code or name of the equipment supplier or select it from the drop-down list. If you plan to associate supplier records with equipment, enter the code instead of the name. See *Chapter 11: Supplier Records,* beginning on page 142 of the *User's Manual* for more information.
Manufacturer	Enter the name of the equipment manufacturer.
Description	Enter a brief, informative description of the equipment (if you use similar words for similar equipment, you can later filter by this field).
Type	Enter the type of equipment or select a type from the drop-down list. When you enter a new equipment type, FaciliWorks will add it to the drop-down list so you can select it when needed.
Storage Location	Enter the equipment's storage location or select a location from the drop-down list. When you enter a new location, FaciliWorks will add it to the drop-down list so you can select it when needed.
Current Location	Enter the actual location of the equipment.
Manual Location	Enter here the actual location of the service manual or equipment manual

Equipment Entry-Task List-Task



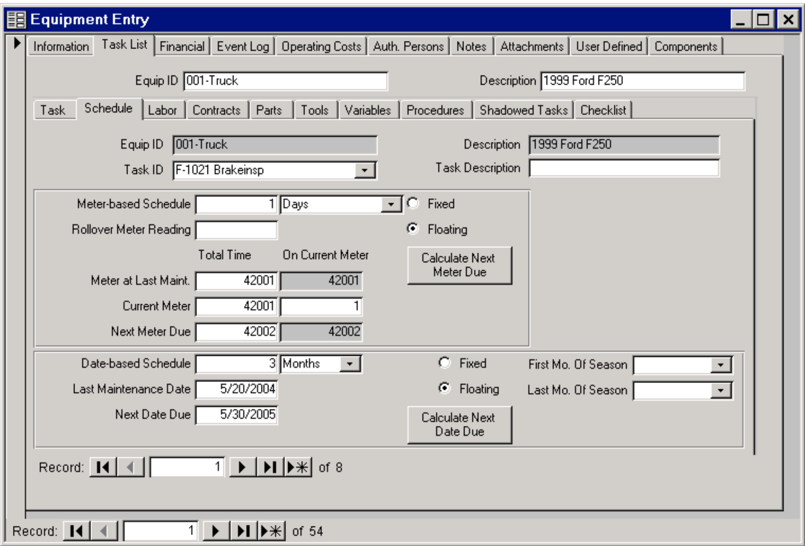
To enter a task for a piece of equipment, click on the **Task List** tab. Because you haven't entered any task records yet, you will have to use this screen to create a task for your equipment. Once you've entered tasks in **Task Entry,** you can go to this screen and select from those tasks (or enter a new task) for your equipment.

Each of the main fields in the **Equipment Entry—Task List—Task** screen is explained in the table below:

Field Name	Description
Equip. ID and Description	This field shows the equipment ID and description that you entered in the **Information** screen.
Task ID	Since you haven't entered a task in **Task Entry** yet, begin creating a new task record by entering a unique task ID code.
Task Description	Enter a description of the task (maximum of 50 characters). Note that this field can only be edited in the Equipment Entry and Task Entry modules. Otherwise, this field is read-only.
Task Type	Enter a description of the type of task. As you add descriptions for **Task Type,** FaciliWorks creates a list of them for you, and you can later select the type from the list.
Technician	In this field, assign a technician to this task. As you enter records in **Staff Entry**, you will have a list to choose from in this field. For this exercise, just enter the technician's name.
Priority	Assign a priority to the task, using numbers, characters, or a combination of both.

Field Name	Description
Task User 1; Task User 2	These fields store any additional information you want to track for your equipment records. See the System Administrator's Guide for more information about changing these and other field labels.
Shut Down Facilities	Place a check in this box if facilities must be shut down when this task is performed.
Shut Down Equipment	Check this box if the equipment must be shut down when you perform this task.
Open Work Order?	This checkbox will be checked if this equipment task has an open work order. A new work order will not be created for this equipment task if this box is checked. When the open work order is completed, the check will be removed.
Time Needed to Perform Maintenance	Enter the estimated time it takes to perform this task.
Time Per Day	Enter the estimated amount of meter reading that this equipment will use per day. For example, if the meter based maintenance frequency is 100 hours and the equipment is used an average of 6 hours per day, 6 should be entered in this field. This is used to calculate an estimated due date for the task.
Comments	In this field, enter important notes about this task.

Equipment Entry-Task List-Schedule

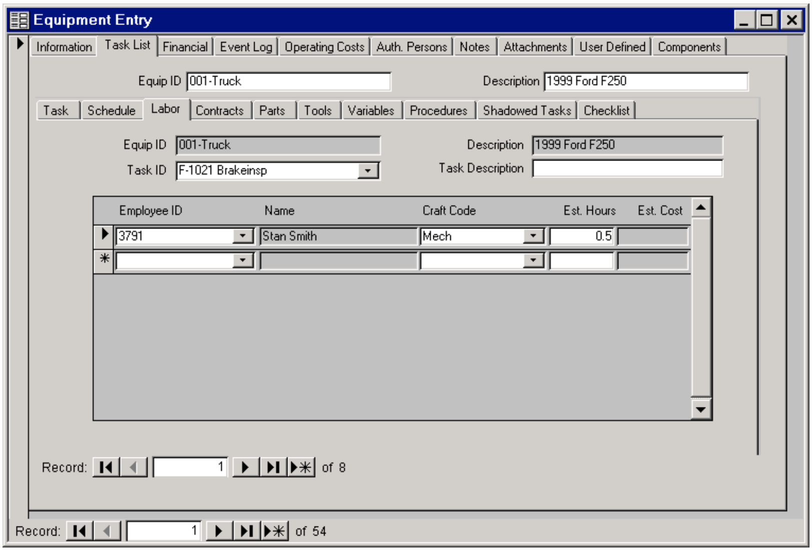


In this screen, enter information about how often your staff should perform this task on this piece of equipment. For example, the sample screen shows that the battery inspection should be performed every 6 months or 7500 miles.

Field Name	Description
Meter-Based Schedule	If the schedule for this maintenance is based on equipment usage or meter readings,

Field Name	Description
	enter the number of units on the left, then select the type of units from the drop-down list on the right. Available units are minutes, hours, days, cycles, miles, and kilometers.
Rollover Meter Reading	In this field, enter the meter value when you replaced it or when it rolled over.
Total Time/On Current Meter columns	Enter the total meter value for Meter at Last Maint., Current Meter, and Next Meter Due in the Total Time column as described below. FaciliWorks will enter values in the On Current Meter column based on the value entered in Rollover Meter Reading above.
Meter at Last Maint.	In this field, enter the meter value for the equipment at the time when you last performed this task. The application will also fill in the updated value for this field when a work order for the task is completed.
Current Meter	Enter the current meter value for the equipment. If you complete any work order for this equipment that has a higher meter reading, then the current meter reading will be updated.
Next Meter Due	Click the Calc button on the right of these entries, and FaciliWorks will automatically calculate the meter value at which this task should be performed next. You can override the calculated next meter value by typing information into this field. This field will be filled in when you complete the work order for this equipment task.
Date-Based Schedule	If you must perform the task according to a calendar schedule, enter the interval number on the left and select the unit of time on the right. The available units are days, weeks, months, years, EOM (End of Month) and DOM (Date of Month). EOM is similar to months, but it advances the next due date to the last valid day of the month (the last valid day of each month will be determined by your skip days and/or dates; see Skip Date Entry on page 272 of the System Administrator's Guide for more information about skip days/dates). DOM is similar to months, but it advances the next due date to the same date each month.
Last Maintenance Date	When you're setting up this task, enter the last date on which this task was performed for this equipment. After the task has been performed again, FaciliWorks will automatically update this field with the most recent completion date.
Next Due Date	Click the Calc button to the right of these entries to make FaciliWorks automatically calculate the next this task should be performed on. Override the automatic calculation by typing the information into this field.
First Mo. of Season; Last Mo. of Season	If the current task is a seasonal task that is not performed year-round, such as mowing a lawn or spreading sand on sidewalks, select the name of the first month the task is performed and the last month the task is performed from the appropriate drop-down list. The calculated next due date for that work order will only fall between the starting month and the ending month, inclusive.

Equipment Entry-Task List-Labor

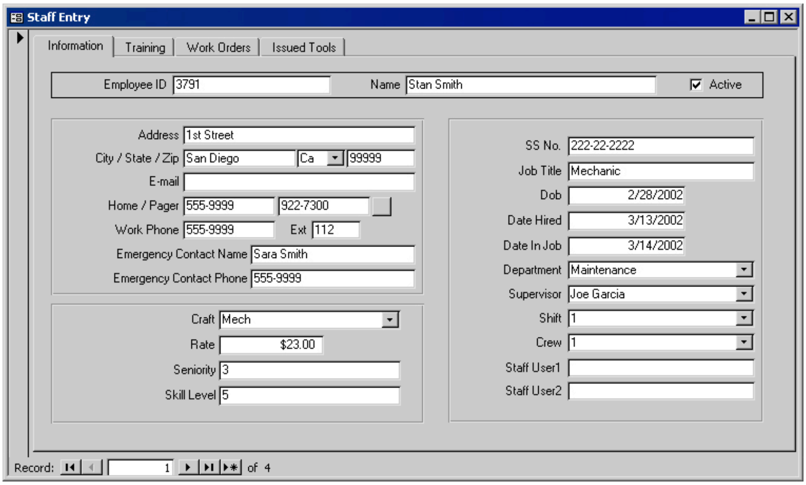


In the **Equipment Entry—Task List—Labor** screen, you can assign active employees to a task. You'll need to enter an employee's record in **Staff Entry** before you can select it here (instructions for entering an employee record in **Staff Entry** are given on page 25). In this screen, you can change the employee assigned to the task, the craft code, or the estimated hours. You can also add additional employees to the task.

Field Name	Description
Employee ID	Select the ID code of the employee assigned to this task.
Name	The employee's name appears here.
Craft Code	Use this optional field for general or specific identification as required by your company. You can store the employee's union affiliation, classification, or department here.
Est. Hours	Estimate how many hours the employee will spend on this task.
Est. Cost	FaciliWorks automatically calculates and displays the estimated cost based on estimated hours multiplied by employee rate. You can't change this field.

Entering an Employee Record

To enter an employee record, go to the **Personnel** menu by returning to FaciliWorks' Main Menu and clicking on the **Personnel** icon in the column on the left-hand side; then click on the **Staff Entry** button. This screen will appear:



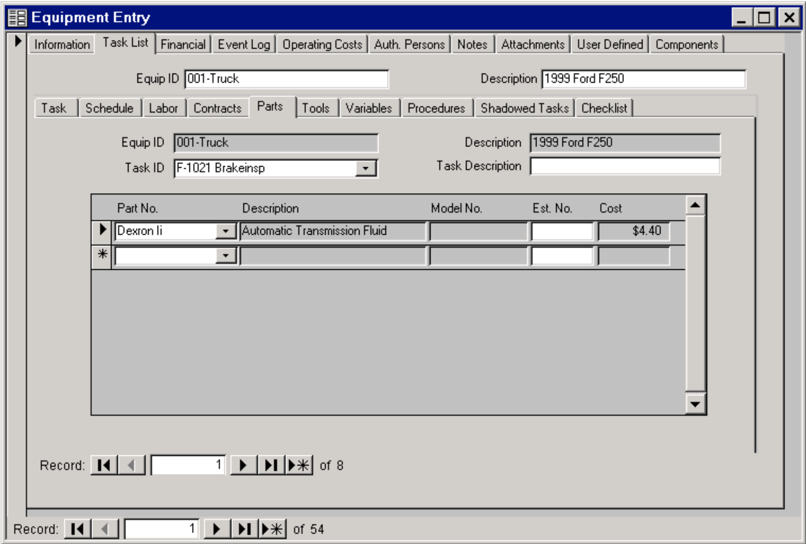
For now, focus on the fields described below. This will allow you to quickly enter an employee record so that you can go back to **Equipment Entry—Task List—Labor** and assign the employee to the task you created for your equipment. For more information on entering employee records, see **Staff Entry—Information** on page 279 of the *System Administrator's Guide*.

Field Name	Description
Employee ID	Create a unique alphanumeric ID for this staff member (or consultant).
Name	Enter the employee's full name.
E-mail	Enter the employee's e-mail address. This is important if you are going to use the Automatic E-mail feature.
Craft	Use this field to categorize your workers by profession. You can use a description, such as welder or electrical engineer; a code, such as MIG-3; or a union number with a classification code, such as 786-Journeyman or 786-Apprentice.
Rate	Enter the employee's hourly rate. FaciliWorks uses this rate to calculate the cost of maintenance.
Job Title	Enter the employee's official job title.

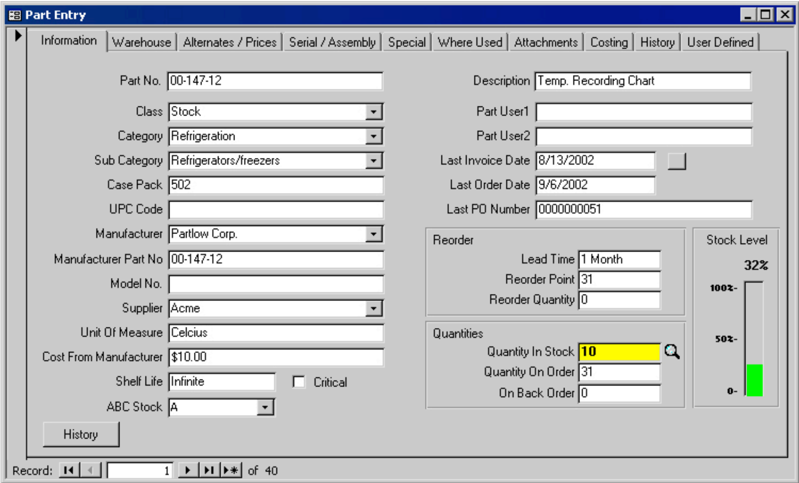
After you've entered an employee record, go back **to Equipment Entry—Task List—Labor/Contract,** and select the employee for this task. When you're finished, go back to the **Equipment Entry-Parts** tab (for now, leave the **Contracts** screen blank; for more information on this screen, please see *Contract Entry* on page 137 of your *User's Manual*).

Equipment Entry—Task List-Parts

In the **Parts** screen, you can select from previously entered information by using the drop-down list at the right of the **Part No.** field. If you've entered the necessary information in **Part Entry,** FaciliWorks will automatically display this data in the corresponding field in this screen. These fields will be gray to show that you can't edit them here. Instructions for entering part records in **Part Entry** are given next.



Part Entry—Information



To enter a new part record, go to the **Inventory** menu by returning to FaciliWorks' Main Menu and clicking on the **Inventory** icon in the column on the left-hand side; then click on the **Part Entry button.** The **Part Entry – Information** screen appears; click on the **New Record** icon or the **New Record** selector to create a new record.

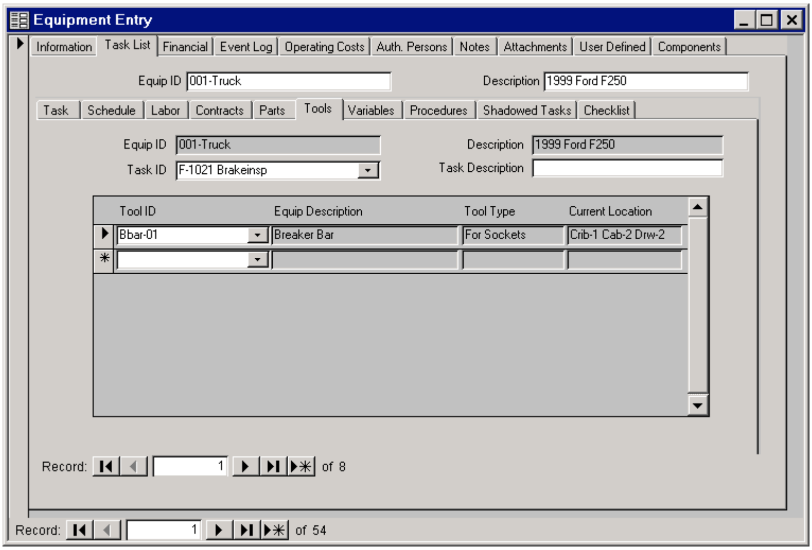
For now, focus on the fields described below. For more information on **Part Entry—Information**, please see page 107 in the *User's Manual.*

Field Name	Description
Part No.	Create a unique alphanumeric identifier for each part.
Description	Enter a brief description of the part.
Model No.	Enter the part's model number, if applicable.
Supplier Cost	In this field, enter the part's current price.
Quantity in Stock	This window displays the current quantity on hand. When you first enter this record, you can fill in this number, but after the record is created, FaciliWorks will update it automatically, based on your work order records. See your *User's Manual* for directions on changing this quantity.
ABC Stock	ABC Stock items fall into the following categories: "A" items are expensive to keep on hand, but are critical items. You would keep a small number of these on hand, but manage the stock level closely. "B" items are not very expensive to keep on hand, but are still required. You would keep a moderate amount of parts in stock, but would not monitor the stock level closely. "C" items are inexpensive parts that may not be critical. You would keep a large number of these parts on hand, but would not monitor the stock level closely.

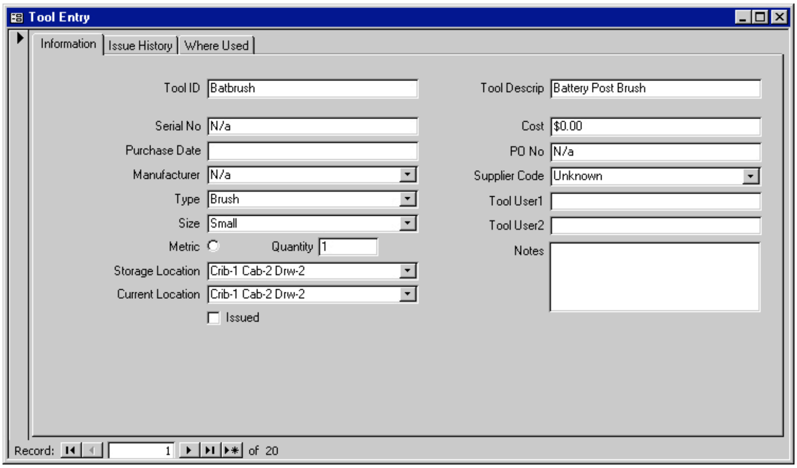
When you've finished entering your part record, go back to **Equipment Entry—Task List—Parts** and select the part to attach it to your task. When you're finished, click on the next tab **(Tools).**

Equipment Entry—Task List—Tools

In the **Tools** screen, you can select from previously entered information by using the data selection arrow to the right of the **Tool ID** field. If you've entered the necessary information in **Tool Entry,** FaciliWorks will automatically display this data in the **Tools** screen. These fields will be gray to show that you can't edit them here. Instructions for entering tool records in **Tool Entry** are given below.



Tool Entry



To enter a new tool record, select **Tool Entry** from the **Tool** menu. Go to the **Tool** menu by returning to FaciliWorks' Main Menu and clicking on the **Tools** icon in the column on the left-hand side, then click on the **Tool Entry** button. Now, click on the **New Record** icon or the **New Record** selector to create a new record.

For now, enter information into the following fields to quickly create your new tool record. For more information on **Tool Entry—Information**, please see page 130 in the *User's Manual.*

Field Name	Description
Tool ID	Enter a unique alphanumeric ID code for the tool.
Tool Descrip.	In this field, enter a description of the tool.
Type	Because you can use this field to filter your tool records, enter tool types consistently. To make it easier to do so, when you enter a new tool type, FaciliWorks adds it to the drop-down list so you can select it when needed.
Current Location	When you first enter the tool, enter its current location in this field. FaciliWorks automatically updates this field whenever you issue the tool.

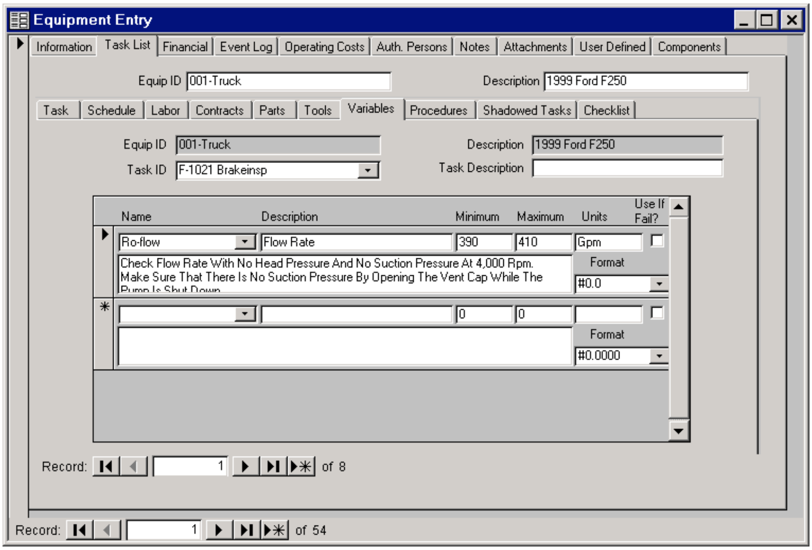
When you're finished, go to the next tab, **Equipment Entry – Task List – Variables.**

Equipment Entry—Task List—Variables

A variable can be any condition that can affect the safe operation of the equipment or the outcome of the maintenance. Therefore, you must check this condition during the course of maintenance. Measured variables normally have to fall within a minimum range, a maximum range, or both. In FaciliWorks, you can attach one or more variables to maintenance tasks. Some examples of equipment, along with possible variables, are listed below.

EQUIPMENT	POSSIBLE VARIABLE(S)
Brake drum	Degrees of flatness
Motors	Oil temperature and oil pressure
Gears	Lash

In the **Equipment Entry—Task List—Variables** screen, you can enter all of the variable information and modify it according to the task; you can also enter variable records in **Variable Entry** (accessed from the **Main Records** menu). See *Variable Entry* on page 148 of the *User's Manual* for more information. For this exercise, enter your variable information for this task in the **Equipment Entry—Task List—Variables** screen.



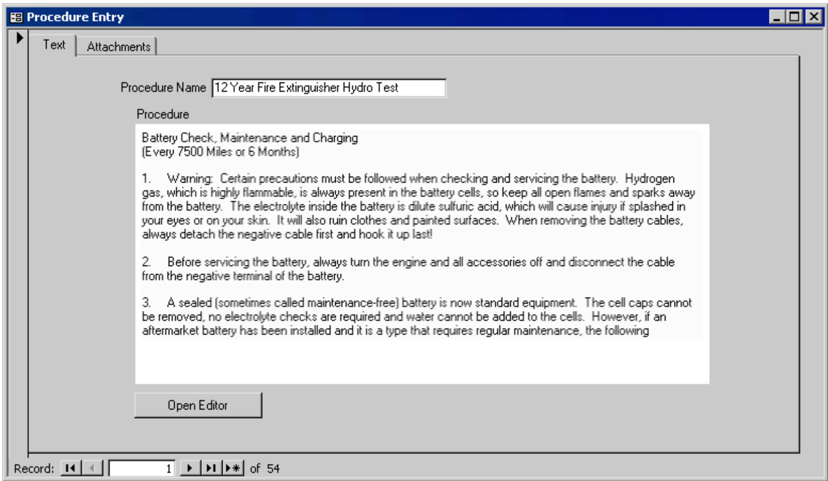
This screen contains the following fields:

Field Name	Description
Name	Enter the name of the variable to be checked. When you enter a new variable name, FaciliWorks will add it to the drop-down list so you can select it when needed.
Description	Enter a brief description of the variable
Minimum	In this field, enter the variable's minimum limit. For example, if the variable is temperature, enter the lowest acceptable temperature for the task.
Maximum	Next, enter the maximum test parameter for the variable.
Units	On the right of **Maximum**, enter the units you are measuring. This could be degrees (for the previous example), inches, foot-pounds, rpm, mAmps, quarts, psi, or any other way of measuring the job conditions.
Use if Fail?	Check this box if you can use the equipment and complete the task even if the conditions specified for the variable are not met.

Field Name	Description
Comments (blank)	Enter any pertinent information, such as instructions for testing the variable.
Format	Select a number format for the minimum and maximum values for this variable.

Procedure Entry—Text

Before you go to the next tab to attach a procedure to your task, you must create a procedure. Close **Equipment Entry—Task List—Variables** to return to the Main Menu; then click on **Procedure Entry** from the **Main Records** menu. Click the **New Record** button on the toolbar, then enter the name of the new procedure. Next, enter the body of text for the procedure in the **Procedure** field.



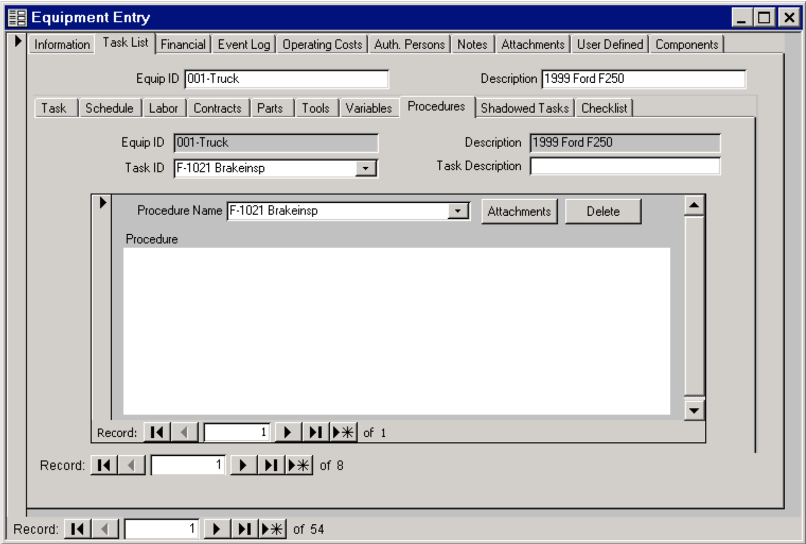
The major fields and buttons in the **Procedure Entry** screen are explained in this table.

Field/Button Name	Description
Procedure Name	Enter a unique alphanumeric name for your procedure.
Procedure	This field is designed for text. Type the procedure in this field, or paste text from the Clipboard into this field (any special text formatting won't be included). To paste a procedure into this field: 1. Open the document containing your procedure. 2. Highlight the text you want to copy and press CTRL-C to copy it to the Clipboard. 3. Go back to the FaciliWorks procedure that you just named. 4. Click in the **Procedure** field. 5. Press CTRL-V to paste the procedure. The pasted procedure will word-wrap to fit the region; you might need to adjust the text.

Close the **Procedure Entry** window to return to the Main Menu; then go back to the **Equipment Entry—Task List—Procedures** screen.

Equipment Entry—Task List—Procedures

In the **Equipment Entry—Task List—Procedures** screen, you can select one or more previously entered procedures that apply to this task. Use the navigation arrows at the bottom of the **Procedures** screen to view any additional procedures that are linked to the record.



Since you haven't selected any procedures for your task, you'll see a blank **Procedures** window. Select the name of the new procedure from the **Procedure Name** drop-down list to add it to the task record for this equipment. After you've selected the procedure name, the rest of the procedure information will automatically appear.

The fields and buttons in **Equipment Entry—Task List—Procedures** are described in this table.

Field/Button Name	Description
Equip. ID and Description	These fields show the current equipment ID and description.
Task ID	Select the name of the desired task from the drop-down list.
Procedure Name	Select the name of the desired procedure from the drop-down list.
Attachments	If you have a file attached to a procedure, click the **Attachments** button to view the attachment list.

Field/Button Name	Description
Delete	Click on this button to delete the current procedure from the current task. A dialog box will appear, giving the option of deleting the procedure from the current task, deleting the procedure completely, from all tasks, or canceling the deletion. WARNING: **Deleting a procedure cannot be undone. Be extremely careful if you choose to delete a procedure completely; if you need it later you will have to re-create it from scratch.**
Procedure	This field is designed for text. Type the procedure in this field, or paste text from the **Clipboard** into this field (any special text formatting won't be included). To paste a procedure into this field: 1. Open the document containing your procedure. 2. Highlight the text you want to copy and press CTRL-C to copy it to the **Clipboard**. 3. Go back to the FaciliWorks procedure that you just named. 4. Click in the **Procedure** field. 5. Press CTRL-V to paste the procedure. The pasted procedure will word-wrap to fit the region; you might need to adjust the text.

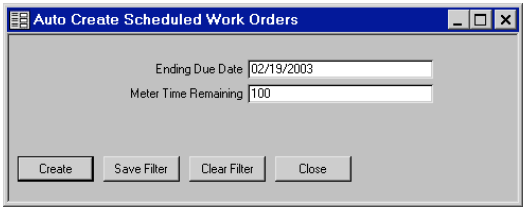
When you're finished, click the **Close** button to return to the Main Menu.

Chapter 5: Entering Work Orders

Now that you've created an equipment task record, you can create a work order for it. FaciliWorks offers you different ways to create work orders; in this guide, we will look briefly at the **Auto Create** function. For more information about work orders, please see *Chapter 14: Work Orders,* beginning on page 151 of your *User's Manual.*

Auto Create Scheduled Work Orders

Select the **Work Orders** icon on the left side of the Main Menu, then click on **Auto Create Scheduled Work.** This filter appears:



To create work orders for all maintenance tasks due by a certain date, enter that date in the **Ending Due Date** field; FaciliWorks automatically fills in a date to one month from the current date, but you may change this date if you wish. To create work orders for tasks due by a particular meter reading, enter the amount of meter time remaining until those tasks are due. If you wish to save a filter for later use, click **Save Filter**. Click **Clear Filter** to remove the filter values; click **Close** to return to the Main Menu without creating the work orders.

When you're ready to create the work orders, click the **Create** button. FaciliWorks creates the work orders, then asks if you want to print them immediately or view them first. The printed work order contains all of the equipment and task information. It will also include a list of parts, tools, and procedures needed for each work order.

Chapter 6: Conclusion

We hope that this quick look at FaciliWorks' major functions has helped you understand more about the structure of your FaciliWorks program. As you study the *User's Manual*, you will understand these features better, and you'll be able to enter more complete information for your records. If you have additional questions or problems, please contact Technical Support at **(480) 922-7300**.

FaciliWorks 7

Maintenance Management Software

Version 7.0

User's Manual

Chapter 1: Introduction

Welcome to FaciliWorks Maintenance Manager for Windows, computerized maintenance management software (CMMS) that gives you an easy-to-use, flexible system for scheduling, managing, and tracking your maintenance tasks. This *User's Manual* will give you detailed information on entering records and work orders into your program, as well as describing FaciliWorks' various reports and graphs. For basic instructions and time-saving tips that will help you use FaciliWorks more efficiently, see *Chapter 2: Program Conventions*, beginning on page 43

A Note about the Software and Technical Support

The FaciliWorks software is simply a tool used to store data, calculate results, and generate printed reports and graphs. The software cannot determine the suitability of the system for your use. Determining this is the responsibility of the user alone.

The technical support available for FaciliWorks is strictly limited to the operation of the software itself. If you have questions regarding maintenance frequency, procedures, tools, etc., please seek the advice of your equipment manufacturer or other qualified professionals.

Validating the Software

This software has been tested, validated, and deemed suitable for release. Calculation validations were conducted using test data with known results. However, these validation tests do not preclude your conducting your own validation tests using data with known results (i.e., results that you calculated manually or proven published values).

It is important to remember that, when comparing the software results to your manually calculated results, you may find that differences exist due to *rounding errors*. FaciliWorks uses up to 15 significant digits of precision in all intermediate calculations; to give the most precise information, only the final results are rounded.

Chapter 2: Program Conventions

To save time and provide consistency, FaciliWorks uses certain operational conventions. You should become familiar with these conventions *before* you begin using FaciliWorks.

Conventions help you navigate through, add, edit, and delete records. Other conventions help you retrieve and print records. Shortcut keys help you save data entry time and avoid mistakes.

Rather than repeating the same information in every part of this manual, we discuss program conventions only in this chapter. The chapters that deal with specific records discuss each record's purpose, fields, special purpose buttons, and any other specific information.

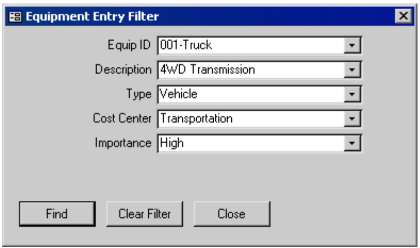
Finding Specific Records

You can use the **Quick Filter** or **Advanced Filter** commands to find a *subset* (*dynaset*) of records that match the criteria you enter. These commands will become quite useful as you enter more and more records into your database. You can use them in the first tab of each record entry form (such as **Equipment Entry – Information** and **Edit Work Orders – Information**).

Quick Filter Command

Use the **Quick Filter** command when you need to quickly find records based on a simple search. You can access this command from the right-click shortcut menu, the **Records** menu, or the **Quick Filter** icon  in the program toolbar.

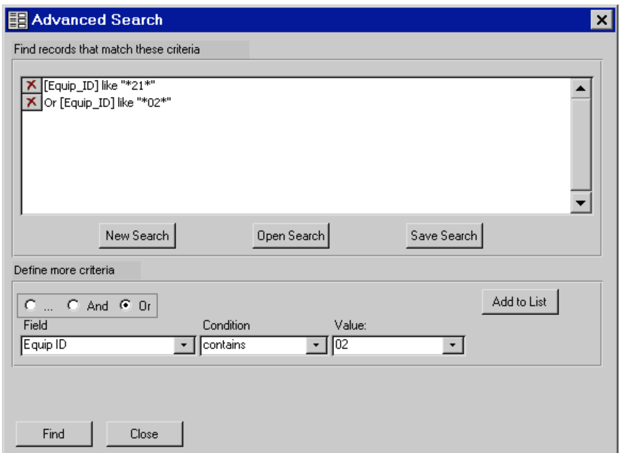
Sample Quick Filter Window



Advanced Filter Command

Use the **Advanced Filter** command when you need to find a very specific record or group of records. This command allows you to set up a customized search filter for your records; you can search by all fields in the form. You can access **Advanced Filter** from the right-click shortcut menu, the **Records** menu, or the **Advanced Filter** icon in the program toolbar.

With **Advanced Filter** you have to build criteria for your report to act as your records filter. You can save a filter by giving it a name and open it again for reuse. By selecting the **Save Search** button, you can specify filter name on the **Report Filter** dialogue window.



Field/Button Name	Description
Criteria	Displays a listing of the generated criteria. Criteria can be combined by using the OR button; before adding another criterion be sure to click on the OR button
New Search	Click to create a new filter name
Open Search	Opens a list of previously saved search criteria
Save Search	You can save search criteria so that you don't have to set up the same searches repeatedly. To do so, click the **Save Search** button after you enter your criteria. The

Field/Button Name	Description
	program asks you to create a descriptive name for each search. Later, when you want to use this search again, select **Advanced Filter**, then click the **Open Search** button to retrieve your saved search.
Delete	(Marked with a red "x"). Deletes the current filter
Radio Buttons …, And, Or	When defining criteria, use these buttons to connect criteria. Use "And" if both premises must be true; "Or" if only one premise must be true.
Add to List	Adds your defined criteria to the criteria list
Field	This drop-down list shows all the fields you can search in the selected report. Field names appear as column headings in the data grid.
Condition	This drop-down list shows the field operators you can use to create search criteria. You can choose from these operators: **contains** – the value listed is a subset or is part of the search field **begins with** - the search field begins with the value listed **ends with** - the search field ends with the value listed **is between inclusive** – the value listed is within the contents of the search field from the first to the last entries **is between exclusive** – the value listed is between the first and the last entry of the search field. **not like**—the value listed is not a subset of or is not part of the search field. = - the search field matches the value listed exactly ←→ - the search field is not equal to the value listed ← - the search field is less than the value listed. →- the search field is greater than the value listed. ←=- the search field is less than or equal to the value listed. →=- the search field is greater than or equal to the value listed. **Is** & **Is Not** – this works only in conjunction with the **Null** value (empty field).
Value	Enter a value to be used in your search. Values may be letters and/or numbers, or a date; however, the Value field will not permit you to enter letters in a numeric field. It will also allow only dates in a date field. Entry conventions are described below.
Find	Displays all records that meet the selected criteria
Close	Closes the Advanced Filter window.

Supported Wildcard Characters in Search Fields

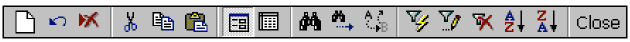
The asterisk (*), question mark (?), number sign (#), exclamation point (!), hyphen (-), and brackets ([ ]) are all wildcard characters. You can use them in record and report filters and in **Find/Replace** commands to include all records that begin with specific characters or match a certain pattern.

Wildcard Character	If You Enter	FaciliWorks Finds
*	wh*	*what*, *white*, and *why*; works like MS-DOS commands
*	*at	*cat*, *bat*, and *what*
*	*/*/94	records with any date in 1994

Wildcard Character	If You Enter	FaciliWorks Finds
*	11/*/*	records with any date in the month of November
?	b?ll	*ball*, *bell*, and *bill*; this symbol matches any single character
#	1#3	*103*, *113*, *123*; matches any single digit (not for use with date fields—use asterisk (*) instead)
[ ]	b[ae]ll	*ball* and *bell*, but not *bill*; matches any single character within the brackets **Tip: Because it allows a literal search on wildcard characters, this character helps you find records that *contain* wildcard characters; for example, to find "Machine #1", you would enter** `Machine [#]1` **(# is another wildcard character).**
!	b[!ae]ll	*bill* and *bull*, but not *bell*; matches any character not in the list between the brackets
-	b[a-c]d	*bad*, *bbd*, and *bcd*; matches any one of a range of characters

Toolbar

FaciliWorks' toolbar gives you quick access to common program commands. It appears in all entry screens. By default it appears just below the menu bar in the upper left hand corner of the FaciliWorks window, but it can be dragged to the left-hand side or the bottom of the window; you can also drag it to float anywhere on your computer screen.



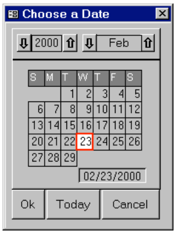
Shown in Horizontal Mode

Button	Description
 New Record	Click this button to add a new record.
 Undo	To undo all of your changes to the current record, click this button.
 Delete	To delete the current record from your database, click this button.
 Cut	You must highlight a field to use this command. Use it to delete the selected text and place it on the **Clipboard**.
 Copy	You must also highlight a field to use this command. **Copy** leaves the selected text in the field, but also places a copy of it on the **Clipboard**. We recommend that you do not use this method to copy entire records (we'll discuss other methods in *Cloning Equipment Records* on page 97).

Button	Description
Paste	To replace the contents of a field with text you copied to the **Clipboard**, first highlight the field you want to replace, then click this button. If you just have your cursor in the field, but it's not highlighted, use this command to insert the **Clipboard** contents at the cursor location (you'll have the **Clipboard** contents *and* the original text in the field). If you don't select a field, this command isn't available. We strongly recommend that you don't use this method to paste records (see *Cloning Equipment Records* on page 97 for instructions on duplicating records).
Form View	Click this button to display your records in Form view (the default presentation of your records). In Form view, you can see all record fields, but only one record at a time.
Datasheet View	To see records in a tabular format, click this button. Datasheet view shows you many records at a time (available only for certain record types).
Find	Use this button when you're looking for a specific piece of information, like a company name. Put your cursor in the field in which you want to search, then click this button to open the search window. In this window, enter the information that you want to find.
Find Next	After you've closed the **Find** window, click the **Find Next** button to find the next occurrence of information you're searching for.
Replace	Use this button to update records. Put your cursor in the field that contains the information you need to change, then click this button. The **Replace** window prompts you for "**Find What**" and "**Replace With**". You can replace any or all instances of the same information.
Quick Filter	To perform a simple search for a specific record or group of records, click this button to open the **Quick Filter** window (see page 43).
Advanced Filter	Use this button when you need to perform a more complex search on your records (see page 44).
Show All Records	If you filter for specific records, then want to see all of your records again, click this button.
Sort Ascending	Use this button to organize records in ascending order (numbers before letters).
Sort Descending	Click this button to arrange records in descending order (numbers after letters).
Close	When you're ready to exit the current screen and return to the Main Menu, click this button.

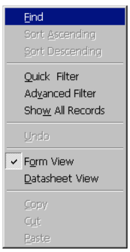
Pop-Up Calendar for Date Entry Fields

FaciliWorks' pop-up calendar lets you enter dates by choosing them from a calendar instead of manually typing them. Whenever you're in a filter or data entry form, **double-click on any date field** to access the calendar; it works only in date fields. When the calendar first appears, it displays the current date. To select another date, click the up or down arrows to find the desired month and year, then click the day of the month. Click the **OK** button to accept the date; click the **Cancel** button to close the calendar without selecting a date.



Shortcut Menu

Within any FaciliWorks data entry window, you can right-click on any field to open a shortcut menu that contains several commands. Each command is explained below. The shortcut menu is available only in main entry windows; if you right-click in a subscreen, you won't see the shortcut menu.



Command	Description
Find	Select this command to search in a particular field throughout your records (select the field by highlighting it or placing your cursor in it). If you do not select a field, FaciliWorks searches through all fields in the filtered group of records; since this second method is extremely slow, we don't recommend using it.
Sort Ascending **and** ***Sort Descending***	Use these commands to organize the order of your records. *Ascending* puts blank records first, then sorts the records from 0-9/A-Z order. *Descending* places the records in Z-A/9-0 order (blank records last). You must select a field to sort by before you can use these commands.

Command	Description
Quick Filter	Use this command to perform a simple search for specific records. See page 43 for instructions.
Advanced Filter	If you need to perform a more complex search for records, choose this command. See page 44 for instructions.
Show All Records	After you filter for specific records, choose this command if you want to access all of your records again.
Undo	This command removes any changes you make to a particular field. If you don't select a particular field, this command removes all changes you made to the current record. This command is not available if you haven't made changes to the record.
Form View **and** ***Datasheet View***	Use these commands to switch from Form to Datasheet view (we'll discuss these types of views next). A checkmark appears next to the current viewing mode. For example, in the above picture of the shortcut menu, **Form View** is checked, indicating that FaciliWorks is showing the record in Form view.
Copy **and** ***Cut***	You must highlight a field to use these commands. Select either of them to put the selected text on the **Clipboard** (the **Cut** command also deletes the selected text). We strongly advise that you do not use this method to copy entire records (we'll discuss other methods in *Cloning Equipment Records* on page 97).
Paste	To replace the contents of a field with text you copied to the **Clipboard**, first highlight the field you want to replace, right-click to open the shortcut menu, then select **Paste**. If you just have your cursor in the field, but it's not highlighted, use this command to insert the **Clipboard** contents at the cursor location (you'll have the **Clipboard** contents *and* the original text in the field). If you don't select a field, this command isn't available. We strongly recommend that you don't use this method to paste records (see *Cloning Equipment Records* on page 97 for instructions on copying and pasting records).

Form Views of Records

After you enter values in the filter window, the program searches the database and presents the first record it finds. It presents this record in Form view. Form views let you see only one record at a time, whereas Datasheet (also called "Table") views allow you to see many records at a time (i.e., each row represents a record, and many rows (records) display at once).

Form view is the default presentation of your data. You can easily switch back and forth between Form and Datasheet views by using the toolbar icons (the **Form** icon looks like this ; the **Datasheet** icon looks like this ), the **View** menu, or the right-click shortcut menu.

Displaying Complete Fields

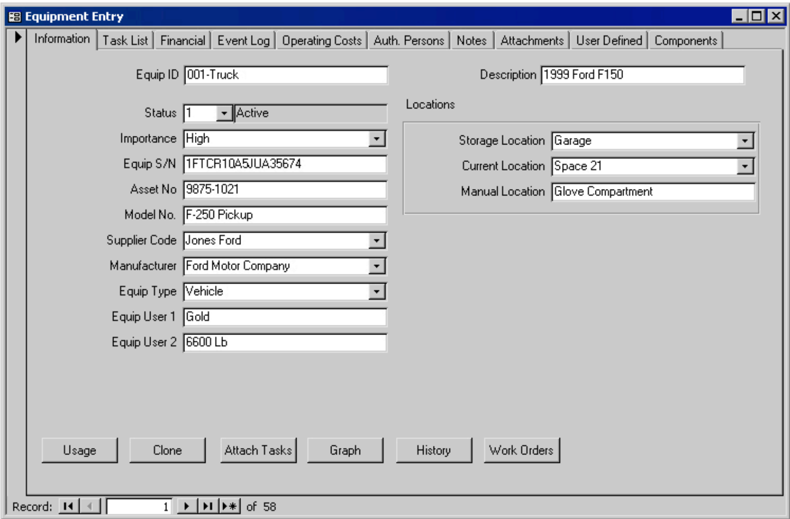
Although you can enter a large amount of text into some of your entry fields, your forms and reports may not be able to display the complete contents of every field. In the entry screens, press **SHIFT-F2** to view the complete text in a pop-up zoom window. You can also view your records in Datasheet mode and widen the column widths to an appropriate width.

Colored Controls and Messages

Information shown in gray fields is permanently associated with a record; therefore, you can't edit these fields. For example, a description is linked to a part number; an employee's name is linked to his or her employee ID. If you want to change information in a non-editable field, go to the original entry screen and change the information in the master record. Changes you make to the master record will appear wherever the information appears.

Yellow fields show calculated or automatically updated information. If necessary, you can edit this information manually. Red, yellow, or blue messages can appear on different screens throughout FaciliWorks to alert you to situations or items that require attention.

Example Form View of an Equipment Record



Elements of a Record Form

All record forms have the following elements:

Form Title Bar

Located at the top of each form, this bar contains the title of the current form (**"Equipment Entry"** in the sample screen). Click the title bar and drag it to move the form to a new location.

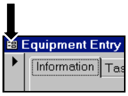
Menu Bar

Located above the title bar, this bar typically has menus for **File, Edit, View, Records,** and **Help.** To select a menu, click on its title. A drop-down list of menu items will appear. Some items may appear gray, to indicate that they are not available; you cannot use these items in Form view.

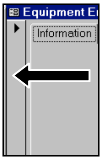
Control Menu Icon

This icon is located to the left of the title bar on forms and reports. If you click once on it, a menu will appear, allowing you to change the screen's size and location. If you double-click on the control icon, it closes the current window.

Control Menu Icon from Equipment Entry Screen



Record Selector Bar



This tall rectangular bar is located on the left side of the form. Use it to select the entire record for subsequent copying or deletion. You can also use it to save changes to the record (if you change any fields, a pencil icon will appear on the bar, indicating that you can click on the bar to write your changes to the database).

Record Selector Bar Symbols

Current Record

Record changed but not saved yet

Record locked and in use by another user

Navigation Buttons

Use the navigation buttons, located in the bottom left corner of the form, to move through your records. Each of the four buttons has an arrow on it that indicates its direction.

First Record

Next Record

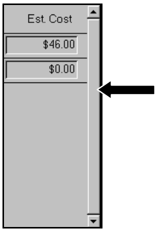
Previous Record

Last Record

Record: Allows you to type in the record number that you want to go to.

> **Example: If you have 250 records and you want to go to the sixteenth record, enter** 16 **in the** Record **box, then press** ENTER **to go to that record.**

Scroll Bars



Scroll bars might appear on the right side, bottom, or both, of a form. You can use them to scroll to portions of the form that aren't visible (which can happen if you reduce the form to a size smaller than its original design).

Tab Selectors

Each tab selector contains an entry screen that stores a specific category of information. Within each tab, you can edit or view information for the current record. The tabs shown above are available in **Equipment Entry.**

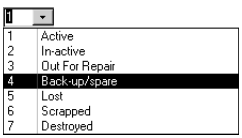
Maximize/Minimize/Restore/Close Buttons

Minimize Button
Restore Button
Maximize Button
Close Button

Use these buttons, located in the upper right corner of the form, to **Maximize** it to the largest size allowed or **Minimize** it to an icon. If you maximize the form, then the **Maximize** button becomes the **Restore** button. Click **Restore** to return the form to its original size.

Drop-down List Buttons

Drop-down list buttons indicate that a field contains a list of items available that you can choose from. When you click the button, the list appears in a scrollable box. Click on any item in the list to enter it in the field.

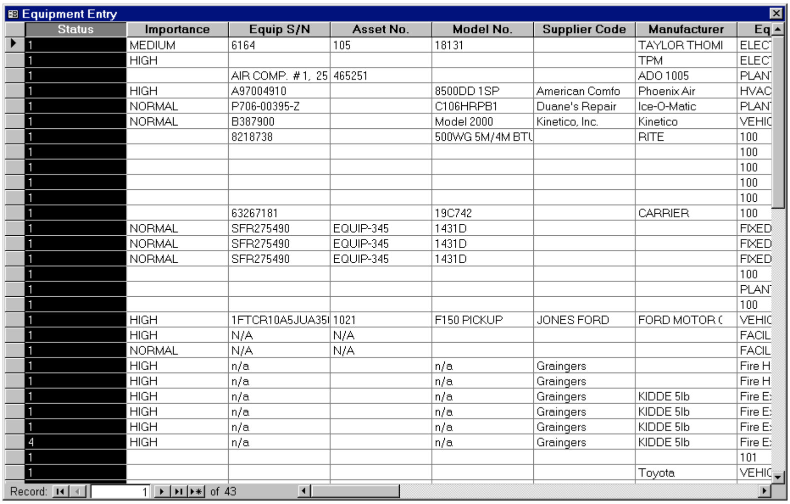


Datasheet (Table) Views of Records

Datasheet (also called "Table") views allow you to see many records at once. Therefore, they can be a more efficient interface for adding or modifying records. Table views operate like spreadsheet programs. Each row represents a record, and each column represents a field. This format is more flexible in that it lets you resize column widths and row heights, rearrange column positions, hide columns, and even change fonts. One drawback of Datasheet views is that they cannot display related records in an *embedded table* (for example, the Table view of equipment records contains an embedded table of task records—you can't see both the equipment record and task records at the same time).

Since the program automatically presents records in Form view, you must manually switch to Table view by using the toolbar, **View** menu, or right-click shortcut menu).

Example Datasheet View of Equipment Records



Equipment Entry

Status	Importance	Equip S/N	Asset No.	Model No.	Supplier Code	Manufacturer	Eq
1	MEDIUM	6164	105	18131		TAYLOR THOMI	ELEC
1	HIGH					TPM	ELEC
1		AIR COMP. #1, 25	465251			ADO 1005	PLAN
1	HIGH	A97004910		8500DD 1SP	American Comfo	Phoenix Air	HVAC
1	NORMAL	P706-00395-Z		C106HRPB1	Duane's Repair	Ice-O-Matic	PLAN
1	NORMAL	B387900		Model 2000	Kinetico, Inc.	Kinetico	VEHIC
1		8218738		500WG 5M/4M BTU		RITE	100
1							100
1							100
1							100
1							100
1		63267181		19C742		CARRIER	100
1	NORMAL	SFR275490	EQUIP-345	1431D			FIXED
1	NORMAL	SFR275490	EQUIP-345	1431D			FIXED
1	NORMAL	SFR275490	EQUIP-345	1431D			FIXED
1							100
1							PLAN
1							100
1	HIGH	1FTCR10A5JUA35	1021	F150 PICKUP	JONES FORD	FORD MOTOR (	VEHIC
1	HIGH	N/A	N/A				FACIL
1	NORMAL	N/A	N/A				FACIL
1	HIGH	n/a		n/a	Graingers		Fire H
1	HIGH	n/a		n/a	Graingers		Fire H
1	HIGH	n/a		n/a	Graingers	KIDDE 5lb	Fire E
1	HIGH	n/a		n/a	Graingers	KIDDE 5lb	Fire E
1	HIGH	n/a		n/a	Graingers	KIDDE 5lb	Fire E
4	HIGH	n/a		n/a	Graingers	KIDDE 5lb	Fire E
1							101
1						Toyota	VEHIC

Record: 1 of 43

Elements of a Table View Window

All Table view windows have the following elements:

Title Bar

Located at the top of the table, this bar shows the title of the table (**"Equipment Entry"** in the above example). To move the window, click this bar and drag the window to a new location.

Menu Bar

The menu bar, located above the title bar, typically has menus for **File, Edit, View,** and **Help.** Click on a menu title, and a drop-down list of items will appear. Some menu items might not be available (they will appear gray).

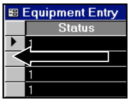
Control Menu Icon

Click this icon, located to the left of the title bar, to change the window's size and location or close it.

Record Selector Buttons

Use these small rectangular buttons, located on the far-left side of each row, to select an entire record for subsequent copying or deletion. You can also use them to save record changes—if you changed the record, a pencil icon appears on the button; click it to write your changes to the database.

You can select multiple records by clicking and dragging your mouse pointer over the desired records. To select a large group of records, click on the first record, then hold down the **SHIFT** key while you click the last record. This function selects both the first and last records and all records in between.



A selector button that has an asterisk (*) on it indicates that a row is a new record position (it's always located at the bottom of the table).

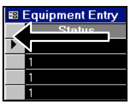
Record Selector Button Symbols

 Current Record

 Record changed but not saved yet

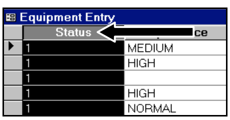
 Record locked and in use by another user

All Records Selection Button



Click this small button, located below the control menu icon, to select *all* records in the table.

Column (Field) Selector Buttons



Each of these small rectangular buttons, located at the *top* of each column, shows the name of the field that the column represents ("**Importance**" and "**Status**" in the above example). Click

one of these buttons to select an entire column to work with it as a whole. For example, click the button to select a column that you want to move or hide.

> **Note: You cannot copy or move the contents of one column to another column.**

Navigation Buttons

Use the navigation buttons, located in the bottom left corner of the window, to move through the records in the table. Each of the four buttons has an arrow on it that indicates its direction.

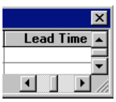
First Record   Next Record

Previous Record   Last Record

Record: Allows you to type in the record number that you want to go to.

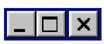
> **Example: If you have 250 records and you want to go to the sixteenth record, enter** `16` **in the Record box (the numbered field between the *Previous Record* and *Next Record* buttons), then press ENTER to go to that record.**

Scroll Bars



Scroll bars might appear on the right, bottom, or both sides of the table. Use the vertical (up/down) scroll bars to scroll to different records. Use the horizontal (left/right) scroll bars to scroll to portions of the table that aren't currently visible.

Maximize/Minimize/Restore/Close Buttons



Minimize Button   Restore Button

Maximize Button   Close Button

Use these buttons, located in the upper right corner of the table, to **Maximize** the table to the largest size allowed or **Minimize** it to an icon. Double-click the table icon to return it back to its original size. If you maximize the table, you'll see the **Restore** button; click it to return the table to original size.

Printing Tables of Records

You can print records in both Datasheet and Form views. To print, select **Print** from the **File** menu. You can also select **Print Setup** and **Print Preview** from the **File** menu. These commands,

combined with the **Filter/Sort** command, will be useful when you're designing customized tabular reports.

Hiding and Displaying Columns

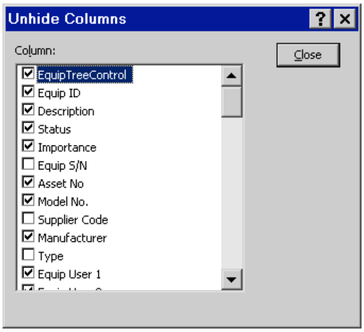
You can temporarily hide columns while in Datasheet view. This helps you remove nonessential data from the screen and reduce the report's width when you're designing a custom report.

To Hide Columns:

1. Click anywhere in the column, or click the selector button of the column you want to hide. To hide multiple columns, drag across the selector buttons.
2. From the **Format** menu, choose **Hide Current Column.**

To Display Hidden Columns:

1. From the **Format** menu, choose **Show/Hide All Columns.**



2. Place a check in the box beside the name of each column you wish to show. Each column will appear as you check its name; if you uncheck a box, the corresponding column will disappear from Datasheet view.
3. When you've selected all the columns you want, click the **Close** button.

Changing the Font in Table View

In Table view, you can change the font size and style and add options, such as underlining. To change the font, select **Format | Font** to open the **Font** window. Your changes won't affect the Form view of your records.

Hiding and Displaying Gridlines

By default, the program displays gridlines around each cell in Table view. To hide gridlines, go to the **Format** menu and choose **Gridlines**. A dialog box will appear; use the options in this dialog box to display or hide gridlines, or control other grid formatting.

Changing the Row Height

To change the height of all rows in a datasheet, choose **Row Height** from the **Format** menu.

Changing the Column Width

Choose **Format | Column Width** to change the width of selected columns in a datasheet. You can also click on the right-hand border of a header cell to change the width of a column.

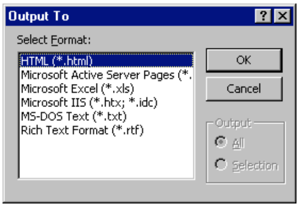
To Freeze Columns

To prevent columns from scrolling off the screen, choose **Freeze Columns** from the **Format** menu to hold the selected columns on the left side of the window. If you haven't selected any columns when you choose this command, the program will freeze the column that contains your cursor. FaciliWorks adds new frozen columns to the right of existing frozen columns. A bold line separates frozen and unfrozen columns.

Other Commands and Functions

Output To Command

Use the **Output To** command from the **File** menu to output data as Rich Text format (.RTF), MS-DOS text (.txt), Microsoft IIS (.HTX, .IDC), Microsoft Excel (.XLS), Microsoft Active Server pages (.asp), or HTML (.HTM, .HTML). When you save the output in .XLS or .RTF format, it includes fonts, layout, and other formatting elements.



Send Command (E-mail Reports)

Select **File | Send** to output reports to Microsoft Outlook (or any MAPI compatible e-mail program) as Rich Text format (.RTF), MS-DOS text (.txt), Microsoft IIS (.HTX, .IDC), Microsoft Excel (.XLS), Microsoft Active Server pages (.asp), or HTML (.HTM, .HTML). The output does not include subforms and subreports. When you save the output in .XLS or .RTF format, it includes fonts, layout, and other formatting elements.

Select Record Command

Use the **Select Record** command from the **Edit** menu to select (highlight) the current record, which allows you to work with it as a whole. For example, use this command to select a record that you want to copy to the **Clipboard**.

Select All Records Command

You can use **Edit | Select All Records** to select (highlight) all records so that you can work with them as a group. For example, use this command to select all records in one table and copy them to another table.

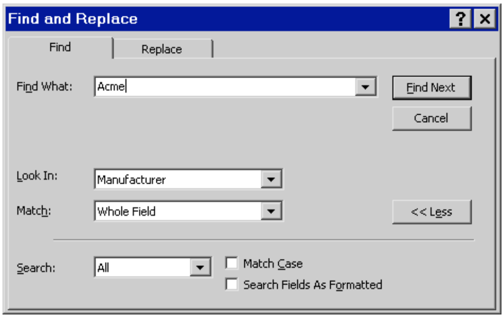
Find Command

When you're in Form or Table view, the **Find** command is available from the toolbar or the **Edit** menu. You can search for any phrase, word, or part of a word. For example, you could look for equipment located in a certain department or for equipment you purchased last year.

Because the **Find** dialog box remains on the screen during searches, you can find as many records as you want. If necessary, drag the **Find** box out of the way to see your records.

To Find Data:

1. Display the table or form for the records you want to search.
2. Select the field (column) in which you want to search (searching a single field is faster than searching in all fields).
3. Select the Find command. The program displays the Find dialog box.



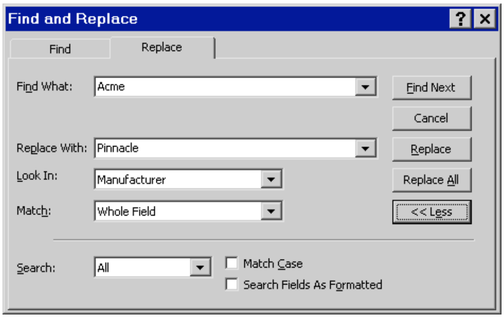
4. In the **Find What** box, type the text you want to find. Use wildcard characters (such as "*", "?" characters) to make your search more general (see page 45). For faster searches, search for the first few characters in a single field.
5. Set other **Find** dialog box options, if necessary.
6. To find the first instance of the text, click the **Find First** button. To find the next instance and all subsequent instances, click the **Find Next** button.
7. When you're finished, click the **Close** button.

Replace Command

When you're in either Form or Table view, the **Replace** command is also available via the toolbar or the **Edit** menu. You can search for and replace all or some occurrences of a phrase, a word, or part of a word. For example, if a manufacturer changes its name, use the **Replace** command to update your records (as shown in the sample screen below).

To Replace Data in a Table:

1. Go to the table or form containing the data you want to replace.
2. Select the field in which you want to replace data, unless you intend to search through all fields.
3. Select the **Replace** command. The program displays the **Replace** dialog box.



4. In the **Find What** box, type the text you want to find. If you use wildcard characters, you may want to confirm text replacements to ensure that the replacements are correct (see below).
5. In the **Replace With** box, type the replacement text.
6. Under **Search**, select **Up, Down,** ***or*** **All** for the direction in which you want to search. If you select **Search Only Current Field,** the program searches for data in the field in which the cursor is located.
7. Set other **Replace** dialog box options, if necessary.

You can confirm each replacement, or you can replace all occurrences without confirmation.

To Confirm Each Replacement:

1. Click the Find Next button to find the first occurrence of the text. The program finds the first occurrence of the text and highlights it.
2. Click the Replace button to replace the highlighted text with the text in the Replace With box. If you don't want to replace this instance of the text, click Find Next to go to the next occurrence.

To Replace All Occurrences without Confirmation:

Click the **Replace All** button.

Quick Sort Command

Use the **Quick Sort** command from the **Records** menu to perform a simple sort of your records, based on the currently selected field(s). You can choose between ascending and descending order (see below). The records return to their original order when you close the form (or table).

Ascending:	A–Z or 0–100
Descending:	Z–A or 100–0

Adding New Records

Adding Records in Form View

To add new records in Form view:

1. Click the New button on the toolbar.

   or

2. Click the Last Record navigation button, then click the Next Record navigation button.

   or

3. Use the keyboard shortcut: CTRL +.

   or

4. Click on the New Record navigation button.

Enter the information into the record and then repeat any of the above steps to add another new record.

Adding Records in Table View

To add new records in Table view:

1. Click the **Last Record** navigation button, then click the **Next Record** navigation button.

   or

2. Scroll to the very bottom row (the record selector button will have an asterisk on it).

Enter the information into the record and then repeat either of these steps to add another new record.

Go To Command

Use the **Go To** command from the **Records** menu to quickly move to different records. The submenu offers you the following options to help you navigate through your records:

Command	Description
First	To move from the current record to the first record, choose **First**.
Last	Select this command to move from the current record to the last record.
Next	If you want to go to the next record, select **Next**.

Command	Description
Previous	To move from the current record to the previous record, use this command.
New	Select **New** to move to a blank record at the end of your records, allowing you to enter a new record.

Show All Records Command

To see the most current records in a form or datasheet, select the **Show All Records** command from the **Records** menu. This command removes any current filters (including a sort created with the **Quick Sort** command), queries the database to find the most current data, and then moves to the first record.

Deleting Records

To delete records, do the following:

1. Go to the record you want to delete and click on its selector bar (or button).
2. Choose Delete from the Edit menu or press the Delete key on your keyboard.
3. The program will ask you to confirm the deletion (sometimes twice).

In Datasheet view, you can delete multiple records. Use the record selector buttons to select the records you want to delete, then follow steps two and three.

Undoing Changes to Fields and Records

If you want to undo changes to a field (and you haven't left the field), either press the **ESC** key on the keyboard or select **Undo Current Field** from the **Edit** menu.

If you've changed more than one field on a record and want to undo your changes, select **Undo Current Record** from the **Edit** menu. If your cursor is still in one of the fields that you changed, first select **Undo Current Field,** then select **Undo Current Record.**

Saving Records

Although FaciliWorks automatically saves the current record whenever you go to a different record or close the form (or table), you can manually save records by clicking on the record selector bar or button. You can also use the **File | Save Record** command to save your records.

FaciliWorks Help

To use FaciliWorks' on-line **Help** feature, select the **Help** menu or press the **F1** key; you can use this feature throughout FaciliWorks' various screens. You can select from different topics listed in the **Help Contents** or you can search through an alphabetical list of program features. For your convenience, there is a **Back** navigation button and **History** listing, so you can quickly return to recent items. Select the **Print** command to print any topic found in FaciliWorks **Help**.

Editing and Shortcut Keys

The following tables list keyboard shortcuts that you can use to save time as you enter records.

Note: Where indicated by "CTRL", hold down the CTRL key while pressing the other key.

Keyboard Shortcuts - General

Press	To
PAGE DOWN	Go to next record in Form view (next page of records in Table view)
PAGE UP	Go to prior record in Form view (prior page of records in Table view)
CTRL '	Copy field data from the prior record's field
CTRL ;	Insert the current date
CTRL :	Insert the current time
CTRL +	Add a new record
SHIFT ENTER	Save changes to the current record
CTRL-	Delete the current record
CTRL ENTER	Add a new line to a memo field
F2	Switch between field editing and navigation modes
F5	Move to the record number entry box
SHIFT SPACE	Select the current record

Field Editing and Selection Keys

Press	To
SHIFT RGT ARROW	Extend the selection or deselect one character to the right
CTRL SHIFT RGT ARROW	Extend the selection or deselect one word to the right
SHIFT LFT ARROW	Extend the selection or deselect one character to the left
CTRL SHIFT LFT ARROW	Extend the selection or deselect one word to the left
CTRL C or *CTRL INSERT*	Copy the selected text into **Windows Clipboard**
CTRL V or *SHIFT INSERT*	Paste text from **Windows Clipboard**

Datasheet (Table) Keyboard Shortcuts

Press	To
TAB, ENTER, or *RGT ARROW*	Move to the next field
END	Move to the last field in the current record (Table view)
SHIFT TAB or *LFT ARROW*	Move to the previous field
HOME	Move to the first field in the current record (Table view)
DN ARROW	Move to the current field in the next record

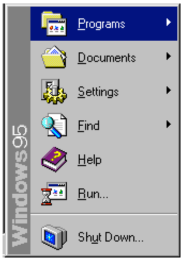
Press	To
CTRL DN ARROW	Move to the current field in the last record
CTRL END	Move to the last field in the last record
UP ARROW	Move to the current field in the previous record
CTRL UP ARROW	Move to the current field in the first record
CTRL HOME	Move to the first field in the first record

Chapter 3: Running FaciliWorks

Starting FaciliWorks

1. Click the **Start** button. 

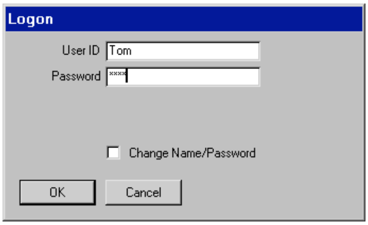
2. Select **Programs.**



3. Select **FaciliWorks 7** and then choose **FaciliWorks 7.** The Main Menu will appear.

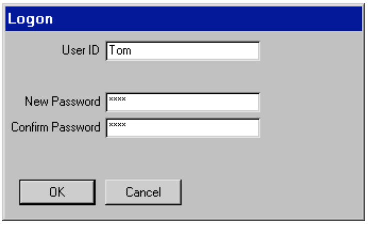
Logon

If your system administrator has set up system security in FaciliWorks, a logon window will appear as shown below when you start FaciliWorks. Enter your User ID and password, then click the **OK** button.



The first time you log in to FaciliWorks, you will see this message:

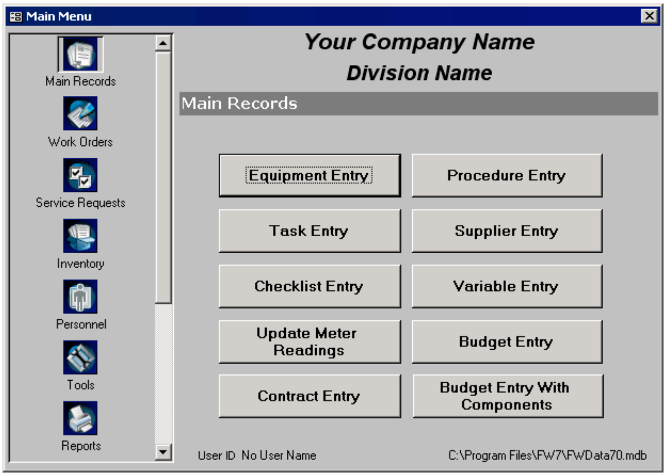
Click **OK**; enter your User ID, then enter a password in the **New Password** field and enter the same password in the **Confirm Password** field. FaciliWorks will require you to enter this password the next time you log in.



When you wish to change your password, click on the checkbox labeled **Change Name/Password** in the **Logon** window. FaciliWorks will require you to enter your old password, then enter and confirm your new password.

Main Menu

Note that the name of the currently logged-in user appears in the lower left corner. The full path to the attached database file, FWDATA70.MDB (FWSAMP70.MDB IF ATTACHED TO THE SAMPLE DATABASE), is displayed in the lower right corner.



This table shows how the different FaciliWorks menus are organized.

Menu Button	Options
Main Records	Equipment Entry
	Task Entry
	Checklist
	Update Meter Reading
	Contract Entry
	Procedure Entry
	Supplier Entry
	Variable Entry
	Budget Entry
	Budget Entry With Components

Menu Button	Options
Work Orders	Auto Create Scheduled Work
	Manual Create Scheduled Work
	Create Unscheduled Work Orders
	Edit Work Orders
	Batch Complete Work Orders
	Export Work Orders to PDA
	Import Work Orders from PDA
	Calendar
	Work Order Status
	Equipment Schedule
Service Requests	Create Service Requests
	Approve Service Requests
	Edit Service Requests
Inventory	Part Entry
	Receive Parts
	Use Parts
	Create Purchase Orders
	Edit Purchase Orders
	EOQ Analysis
	Export Inventory to PDA
	Import Inventory from PDA
Personnel	Staff Entry
	Security
	Staff User List
Tools	Tool Entry
	Issue Tools
	Return Tools
	Edit Tool Issue and Return Records

Menu Button	Options
Reports	Equipment Reports Equipment Cost Reports Task Reports Open Work Order Reports Historical Work Order Reports Service Request Reports Contract Reports Part Reports Procedure Reports Staff Reports Supplier Reports Tool Reports Variable Reports Program Reports
Graphs	Equipment Graphs Equipment Cost Graphs Work Order Graphs Staff Graphs Part Graphs Variable Graphs
KPI	KPI Entry KPI Status KPI Display
Setup	Settings Work Order Cause Entry Multiple Choice Entry Report Control Entry Service Request Letter Entry Equipment Status Entry Work Order/Service Request Progress Custom Reports

Menu Button	Options
Utilities and Data Tools	Utilities
	Audit Log
	Data Backup
	Import/Export Records
	Modify License
	Records Archive
	Merge Utility Wizard
	Equipment Parent Child History
	Reset Messages
	Data Tools
	Calculate Due Dates and Meters
	Fill Maintenance Dates
	Fill Part and Tool Use
	Find Uncodeable Records
	Recover PDA Work Orders
	Remove Spaces
	Repair Work Order Dates
	Reset Open Tasks
	Compact/Repair Database
	Reset Tools Issue Status
	PDA
	Export Work Orders to PDA
	Import Work Orders from PDA
	Export Inventory to PDA
	Import Inventory from PDA
	Export Meters to PDA
	Import Meters from PDA

Chapter 4: Equipment Records

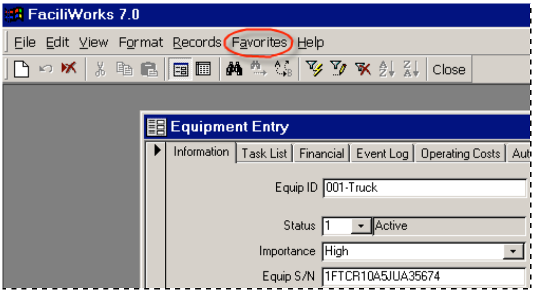
From the **Main Records** menu, you can enter equipment and task records, including associated records for parts, tools, procedures, contracts, variables, and suppliers. Before you begin entering records, we recommend that you read *Chapter 2: Program Conventions,* beginning on page 43 to familiarize yourself with FaciliWorks' basic commands, functions, and timesaving shortcuts.

Equipment Entry

In the **Equipment Entry** record window, you can enter equipment information, define maintenance tasks, and assign appropriate maintenance procedures to your equipment.

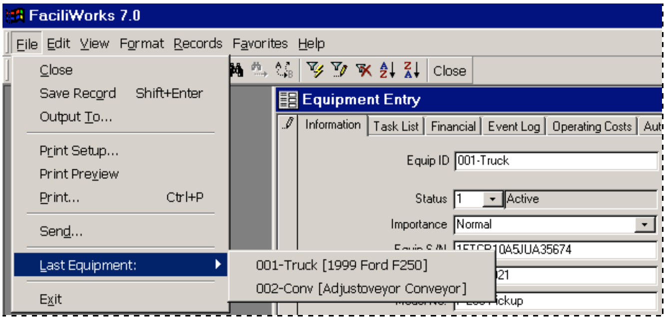
You can create records to include any equipment you want to provide maintenance scheduling and tracking for. Equipment can include everything in your business that you need to test, replace, or service at regular intervals, based on either elapsed time or actual usage. It might include vehicles, machinery, individual components, fixtures, and facilities.

You can also bookmark records you frequently use or access, making it easy for you to find the data you need. To do so, simply access the **Favorites** option from the menu bar and add the record to your favorites. If there's no more need for the record you bookmarked, you can delete them, and you can also organize records you have marked as your Favorites.



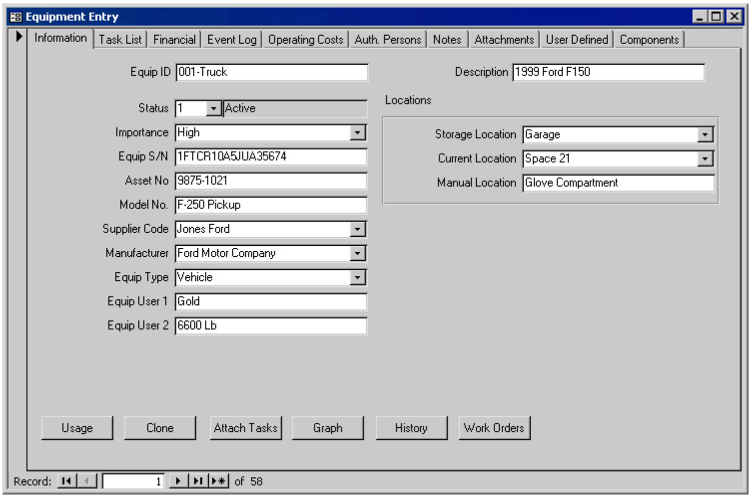
Note: The Favorites option is only available in the Equipment Entry and Edit Work Orders modules.

The Most Recently Used (or MRU) equipment list feature is found under the **File** menu. This functionality displays the last 10 records you edited, with the one on top of the list being the most recently changed or modified. In the example illustrated in the screenshot below, the last edited record is that of 001 – Truck (1999 Ford 250).



To enter equipment records, select **Equipment Entry** from the **Main Records** menu. The **Equipment Entry—Information** screen will appear.

Equipment Entry—Information



To add a new equipment record, click on the **New Record** icon or the **New Record** selector.

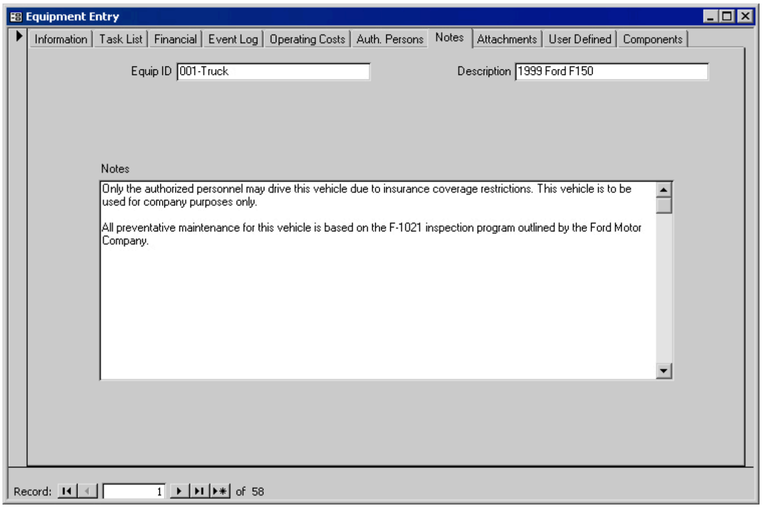
Use your mouse or **TAB** key to move among fields in the **Equipment Entry** window. Each field and button in the **Information** screen is explained below.

Field Name	Description
Equip. ID	Enter a unique alphanumeric identification code for each equipment record. You must create a unique ID for each piece of equipment in order to store the record in your database Important: **Avoid using #, *, ?, !, ', or [ ] in your Equip. ID field or other fields, as FaciliWorks considers them to be wildcard characters (wildcards help you search and filter records). If you must use these characters, such as in "Boiler #1", then you must put brackets around the wildcard character whenever you use it to filter records (for example, enter "`Boiler [#]1`"). For more information on wildcards, please see the *Program Conventions* section of the *User's Manual*.**
Description	Enter a brief, informative description of the equipment (if you use similar words for similar equipment, you can later filter by this field).
Status	Assign a status to the equipment. Use the drop-down list to pick from available choices (1—Active, 2—In-Active). This field is required. Important: **If the Status field is *not* 1 (Active), the Maintenance Due reports will skip over this equipment, as they show only *active* equipment.**

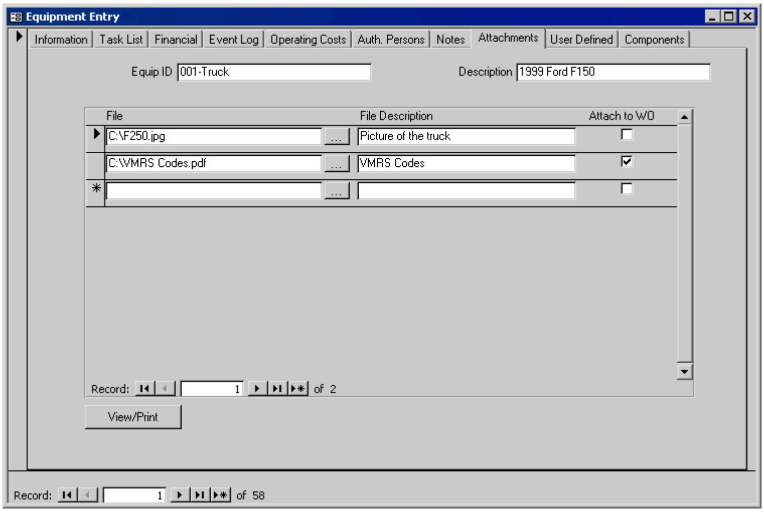
Field Name	Description
Importance	Enter the equipment's priority rating or select a rating from the drop-down list to indicate how important the equipment is to your operations. When you enter a new priority type, FaciliWorks will add it to the drop-down list so you can select it when needed.
Equip. S/N	Enter the equipment's serial number.
Asset No.	Enter the equipment's asset number (usually issued by your accounting department).
Model No.	Enter the equipment's model number.
Supplier Code	Enter the ID code or name of the equipment supplier or select it from the drop-down list. If you plan to associate supplier records with equipment, enter the code instead of the name. See *Chapter 10: Supplier Records,* beginning on page 139for more information.
Manufacturer	Enter the name of the equipment manufacturer.
Type	Enter the type of equipment (this field also creates its own list as you enter different types).
Equip User 1; Equip User 2	Use these two fields to store additional information about the equipment. See *Changing Field Labels in FaciliWorks* on page of the *System Administrator's Guide* for information about changing these and other field labels. If you need more than 2 user defined equipment fields, you can use the User Definable fields under the **User Defined** tab. See page 274 of the *Systems Administrator's Guide* for information changing field type and field labels for these fields under *Settings-User Information-Custom Labels*.
Storage Location	Enter the equipment's storage location or select a location from the drop-down list. When you enter a new location, FaciliWorks will add it to the drop-down list so you can select it when needed.
Current Location	Enter the actual location of the equipment. (FaciliWorks will automatically update this field based on the equipment's issue and return information—see page 98).
Manual Location	Enter the actual location of the service manual or equipment manual
Usage	Click *this* button to issue or return this equipment (see page 98).
Clone	Click this button to create a new equipment record based on the current record (see page 97).
Attach Tasks	Click this button to assign a task to all equipment of this type (see page 102).
Graph	Click this button to view or print an **Equipment Downtime** graph (see page 101).
History	Click this button to see the equipment's work order history (see page 101).
Work Order	Click this button to view and edit work orders for the current equipment (see page 151).

Equipment Entry—Notes

Use this screen to enter or paste text that applies to the equipment.



Equipment Entry—Attachments



In the Attachments screen, you can attach pictures, maps, PDF files, HTML pages and other file formats to your equipment. This will also give you the option to print attachments along with your Work Orders.

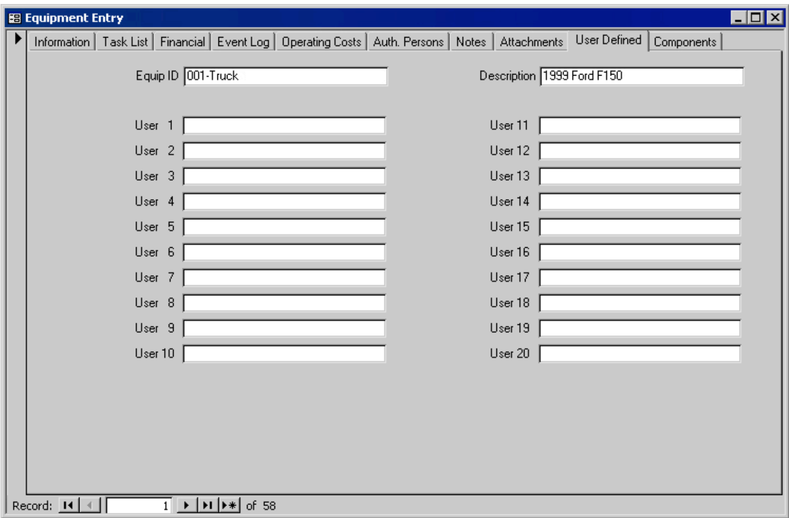
Note: You can use file formats as long as you have a viewer on your system that supports that format. For example, you would need to have Adobe Acrobat Reader installed on your computer to be able to view .PDF files.

Each field and button in this screen is described in this table.

Field/Button Name	Description
Equip. ID and Description	The current record's equipment ID and description appear in these fields.
File	Enter the name of the attached file.
... **(Browse for Image)**	If you don't know the exact path and filename of the image, click the ... button to navigate through your directories and files to find the file.
File Description	Enter here a brief description of the attached file
Attach to WO	If you want to include images in printed work orders, check the checkbox beside each image that you want to include.
View/Print	Click on this button to open the file for viewing or printing. FaciliWorks will open the file with the Windows default file type settings as registered. If no match is found, you will be prompted to select an appropriate program.

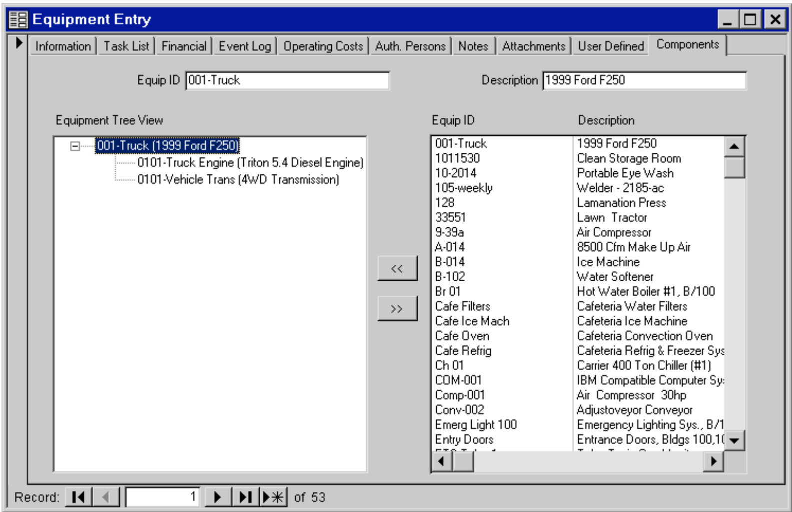
Equipment Entry-User-Defined

You can assign user-defined field names from **Setup-Settings-Interface-Equipment Custom.** This form gives users more flexibility. You have 20 user-definable fields to use in your record keeping and even include in reports. You can also control whether the field is a text field, a date field, or a drop-down list by choosing the appropriate option from the **Field Type** list.



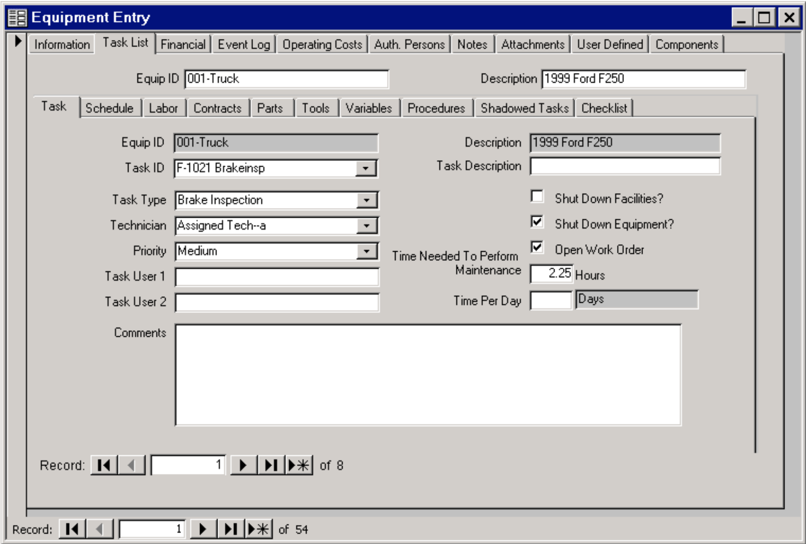
Equipment Entry-Components

This form gives a "tree view" of parts relationships. Components can be easily attached to each other by selecting the first the "parent" component from the **Equipment Tree View** panel on the left side of this window, then selecting a "child" component from the **Equip ID** panel on the right side of the window; then click the ←← button in the middle to create the link.



When components are linked as shown here, any computation done to a "child" component, such as meter readings, cost computation, due dates and so forth, will have an effect on the total computation for the "parent" component. For example, if we have a truck, its engine might be a child component. A part of the engine's regular maintenance might be changing the oil at regular intervals. When the cost of changing the oil varies, FaciliWorks automatically recalculates the overall cost of maintaining the truck.

Equipment Entry—Task List Selection and Entry



In the **Equipment Entry—Task List—Task** screen, you can select from previously entered tasks or enter a new task to assign to your equipment. If you select a task that you previously entered in **Task Entry**, all of the task information you entered will appear in this screen. If you wish, you can edit the information in this screen to suit the task specifically to this equipment (select the task from the drop-down).

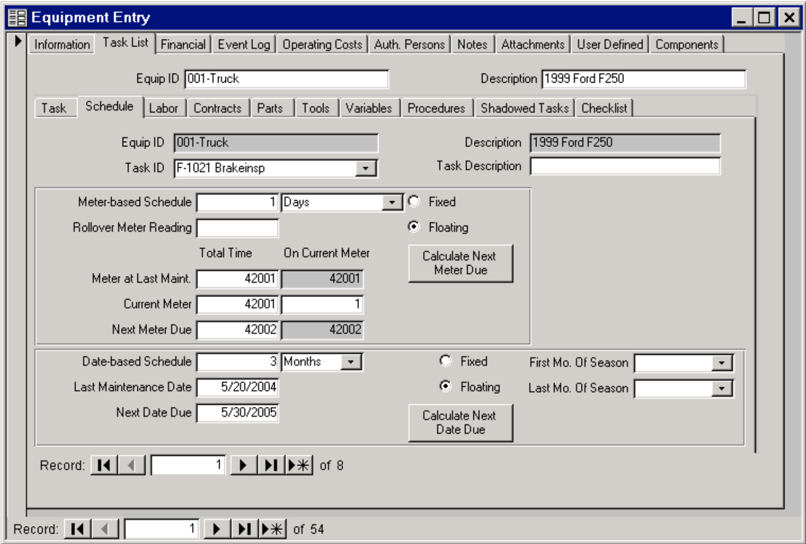
> **Important: If you change the task in this screen, FaciliWorks considers those changes specific to the current equipment record. Your changes will not appear in any other records linked to that task. Any *new* task that you create within the equipment record belongs to that particular piece of equipment—meaning that you can't use it for any other equipment records. If you need to create a task that will be available for *all* of your equipment records, enter it in Task Entry, then return to your equipment record and link it to the equipment by selecting it from the Task ID drop-down list.**

Each of the fields in this screen is explained in the table below:

Field Name	Description
Equip. ID and Description	This data is already visible because you previously entered or selected it in the **Information** screen.
Task ID	Select an existing task ID or create a new task by entering a unique task ID.

Field Name	Description
Task Description	Enter a description of the task (maximum of 50 characters). Note that this field can only be edited in the Equipment Entry and Task Entry modules. Otherwise, this field is read-only.
Task Type	Enter a new task type or use the list box to select an existing task type.
Technician	Select a technician from the list of active employees or enter a new technician.
Priority	Assign a priority to the task (optional). This entry can consist of numbers, characters, or a combination of both.
Task User 1; Task User 2	Use these two fields to store additional information about the task. See *Changing Field Labels in FaciliWorks* on page 273 of the *System Administrator's Guide* for information about changing these and other field labels. If you need more than two user-defined task fields, you can use the User Definable fields under the User Defined tab. See page 274 of the *Systems Administrator's Guide* for information changing field type and field labels for these fields under *Settings-User Information-Custom Labels*.
Comments	Use this field to store additional information about this task.
Shut Down Facilities	Check this box to indicate that the task requires the facility to be shut down.
Shut Down Equipment	Check this box to indicate that the task requires the equipment to be shut down..
Open Work Order	This box contains a checkmark if you currently have an open work order for this equipment task. You can change this field if necessary–remove the check if you don't have an open work order for this task or check the box to show that it does have an open work order.
Time Needed to Perform Maintenance	Estimate how long it will take the technician to perform this task.
Time Per Day	This feature directly relates to the Calendar feature found under Work Orders. Use this field to calculate when maintenance will be due based upon the meter reading. For example, Equipment 01 has Task 01 that has a Meter based schedule of 100 hours. The Current Meter Reading is 50 hours and the Time Per Day is 10 hours. The person opens the maintenance calendar on 02/11/2002. Task 01 will show up on the calendar on 02/15/2002. Task 01 will next show up on the calendar on 02/25/2002 (100 hours/10 hours per day = 10 days; 02/15/2002 + 10 days = 02/25/2002). If an Equipment Task has both date-based and meter-based schedules, only use the schedule that is schedule first.

Equipment Entry—Task List—Schedule



Meter Rollover

In **Equipment Entry—Tasks** and **Work Order Entry**, you can enter meter rollover points for your equipment. The meter rollover point is the point at which the equipment's meter reaches its maximum reading and rolls over to 0. You can also use it for meters that you replace. When setting up this feature, enter the total meter time used, which is not necessarily the same as the current reading (i.e., if the meter rolled over or was replaced, the total meter value will be higher than the current reading).

Meter at Last Maint., **Current Meter**, and **Next Meter Due** in **Equipment Entry – Task List – Schedule** each have two entry fields. The fields on the left reflect the *total accumulated* meter value; the fields on the right reflect the *current* meter reading.

For example, suppose you have a forklift; you change its oil whenever the meter reads 2250. You also replace the meter at this oil change. Enter 2250 as your **Rollover Meter Reading**. The left **Last Maint. Done** field will show 2250 hours (the total time). The right **Last Maint. Done** field will show 0 – the current meter value when the oil change was completed.

Let's say that you've used the forklift for 10 hours. The left **Current Meter** field will show 2260 (total time equals the original 2250 plus the new 10 hours), but the right **Current Meter** field will show 10 hours – the actual reading on the new meter.

You've also scheduled the oil change to take place every 50 hours. Therefore, the left **Next Meter Due** field will show 2300 (the original 2250 plus the next 50 hours). The right **Next Meter Due** field will show 50 hours – the new meter should read 50 when you do the next oil change.

Now, let's say that you perform the next oil change at 2300/50 hours, but the meter breaks during this oil change and you have to replace it. Now, you enter 2300 into the **Meter Rollover** field to reflect the total time for which you've used the forklift. You can enter the **Current Meter** value – 2300/0 – into either one of the **Current Meter** fields. The **Last Maint. Done** and **Next Maint. Due** fields on the right are locked; you can enter data only in the left fields.

Any entries you make in the **Current Meter**, **Rollover Meter Reading,** or **Current Meter Reading** fields will update all of the equipment tasks for this piece of equipment. FaciliWorks will also update the rollover point in any existing incomplete work orders for this equipment task that have blank **Meter Maint. Done** fields.

Reports

Any report that can show incomplete work orders (such as the **Work Order** or **Work Order Summary** report) will show both the total meter time and the current meter reading.

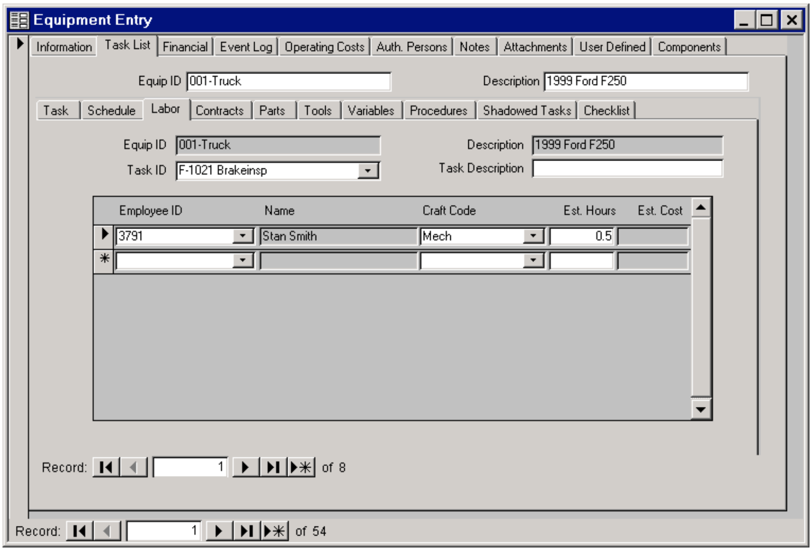
Reports that show only completed work orders (such as the **Work Order History** or **Work Order Cost** report) will show only the total meter time.

The meter rollover feature does not affect reports that show scheduling information since they operate on the actual value of the difference between the last meter and the next meter due. See *Chapter 14: Work Orders,* beginning on page 151, for more information.

Field Name	Description
Task ID	This field shows the Task ID for the current task.
Meter-Based Schedule	If the schedule for this task is based on equipment usage or meter readings, enter the number of units on the left. Use the scrolling arrow on the right to select the type of units. The available units are *minutes, hours, days, cycles, miles,* and *kilometers*.
Rollover Meter Reading	In this field, enter the total time on the meter when you replaced it or when it rolled over.
Total Time/On Current Meter columns	Enter the total meter value for *Meter at Last Maint., Current Meter,* and *Next Meter Due* in the *Total Time* column as described below. FaciliWorks will enter values in the *On Current Meter* column based on the value entered in *Rollover Meter Reading* above.
Meter at Last Maint.	Enter the meter value of the equipment at the time when this task was last performed.
Current Meter	In this field, enter the current meter value for the equipment.
Next Meter Due	Click the **Calc** button to the right of the meter fields if you want FaciliWorks to automatically calculate the next meter value for this maintenance. You can override the automatically calculated next meter value by typing the information into this field.
Date-Based Schedule	If you must perform the task according to a calendar schedule, enter the interval number on the left and select the unit of time on the right. The available units are *days, weeks, months, years, EOM (End of Month) and DOM (Date of Month)*. EOM is similar to months, but it advances the next due date to the last valid day of the month (the last valid day of each month will be determined by your skip days and/or dates; see the *System Administrator's Guide* for more information about skip days/dates). DOM is similar to months, but it advances the next due date to the same date each month.

Field Name	Description
Last Maintenance Date	When you are setting up this task, enter the last date on which this maintenance was done for this equipment. After you've entered a **Work Order** record for this equipment and task, FaciliWorks will automatically update this field with the most recent completion date.
Next Due Date	If you click the `Calc` button to the right of these entries, FaciliWorks will automatically calculate the date on which you should perform this task again. You can override the automatic calculation feature by typing the information into this field.
Fixed	If you want the next maintenance due date/meter to always occur on a certain day or at a certain level, select this option. For example, if a task with a one-month frequency is due on January 1, and you perform the maintenance on December 30, a Fixed schedule will make the *Next Due Date* February 1. To select this option, fill in the circle next to it.
Floating	Select this option if you want to base the next maintenance due date/meter on when (or at what meter reading) you last performed the maintenance. For example, if a maintenance task with a one-month frequency is due on January 1, and you actually complete the task on December 30, a Floating schedule will make the *Next Due Date* January 30. To select this option, fill in the circle next to it. For information about how Floating and Fixed schedules apply to work orders, see *Fixed Schedule and Floating Schedule* on page 158.
First Mo. of Season; Last Mo. of Season	These fields are used to create a season for equipment tasks. A season is the portion of the year a task needs to be done in. For example, in the spring and summer the lawn should be mowed once a week. But the lawn is dormant during the fall and winter, so it doesn't need to be mowed. Therefore, the season of the *Mow Lawn* task is the spring and summer. We set **First Mo. of Season** to March and **Last Mo. of Season** to September. When the *Mow Lawn* work order is completed, the next date due will be calculated. If this date falls during the months from March through September, then the due date is not changed. If this date falls in the months from October through February, then the date will be moved by month until the **First Mo. of Season.** Therefore, if the *Mow Lawn* work order is completed on September 27th, the next date due should fall on October 4th. Since this date is outside the season, FaciliWorks calculates the next date due as March 4th of the next year.

Equipment Entry—Task List—Labor

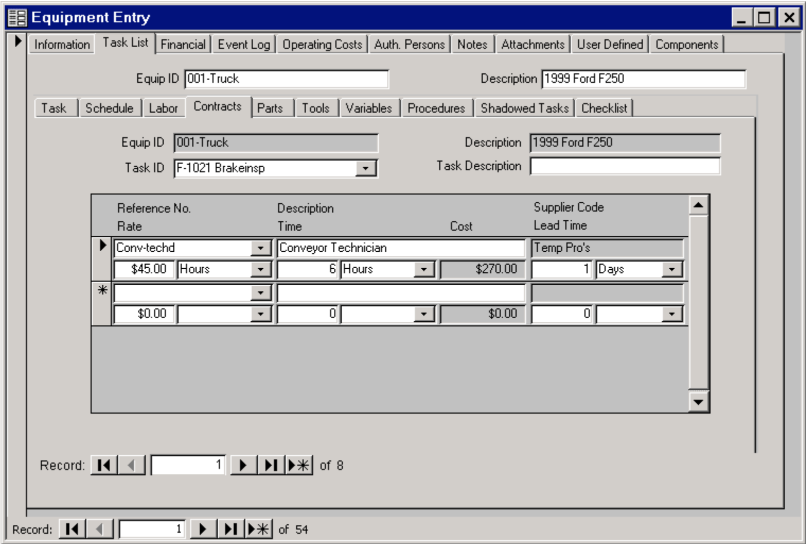


In this screen, you can select from previously entered active employees to assign one or more of them to the task. You can change the employee assigned to the task, the craft code, or the estimated hours.

Each of the fields in this screen is explained below.

Field Name	Description
Task ID	This field shows the Task ID for the current task.
Employee ID	Enter a unique alphanumeric ID for each employee. You could use social security numbers or combine department or division numbers with employee names or numbers.
Name	When you select the ID, the employee's name appears in this field.
Craft Code	Enter the employee's union affiliation, department, or classification.
Est. Hours	Estimate how many hours for which you'll need the employee for this task.
Est. Cost	FaciliWorks automatically calculates the estimated cost, based on the number of hours multiplied by the employee's rate. You can't edit this field.

Equipment Entry—Task List—Contract



In this screen, you can enter any contract information that applies to this task for this equipment. Each field in this screen is described below.

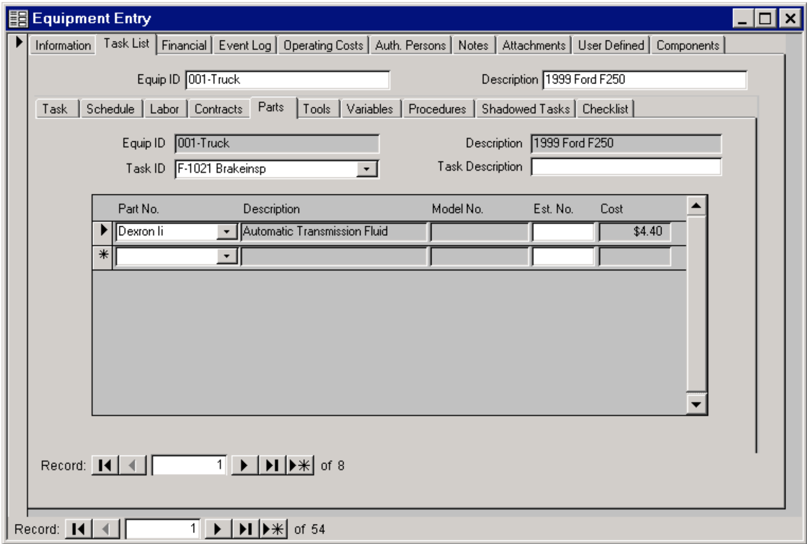
Field Name	Description
Task ID	This field shows the Task ID for the current task.
Reference No.	Enter a unique alphanumeric identification code for each contract.
Rate	Enter the dollar amount for the contract in the left-hand field and the unit of time in the right-hand field—for example, *\$20.00 Hour, \$500 Day,* or *\$0.25 Mile.*
Description	Enter a brief description of the services or equipment that the contract provides.
Time	Enter the amount of time required in the left-hand field and the unit of time in the right-hand field.
Cost	FaciliWorks automatically calculates and displays the estimated cost, based on the time required multiplied by the rate.
Supplier Code	The name of the contract supplier appears in this field.
Lead Time	Enter the current lead time for the equipment or service, such as *4 Hours* or *2 Days*.

Equipment Entry–Task List—Parts and Tools

You must enter records for parts and tools in **Part Entry** and **Tool Entry** before you can assign them to equipment task records. Please see *Part Entry* on page 107 and *Tool Entry* on page 130 for instructions. After you enter these records, return to the **Parts** or **Tools** screens and select from the parts and tools you entered. The associated fields will automatically display

the information that you entered. These fields are gray to indicate that you can't change them here; go back to **Part Entry** and **Tool Entry** to edit this information.

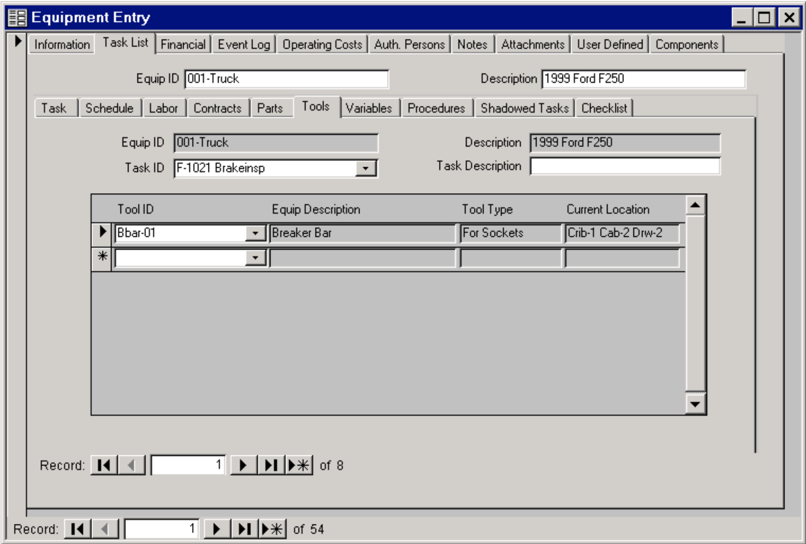
Equipment Entry—Task List—Parts



Each of the fields in this screen is explained below.

Field Name	Description
Task ID	This field shows the Task ID for the current task.
Part No.	Select the ID code for each part needed for this task.
Description	This field shows the description of the selected part.
Model No.	The model number of the part appears in this field.
Est. No.	Enter the estimated number of parts required for the task.
Cost	FaciliWorks automatically calculates and display the total cost, based upon the estimated number of parts required and the unit cost of the part.

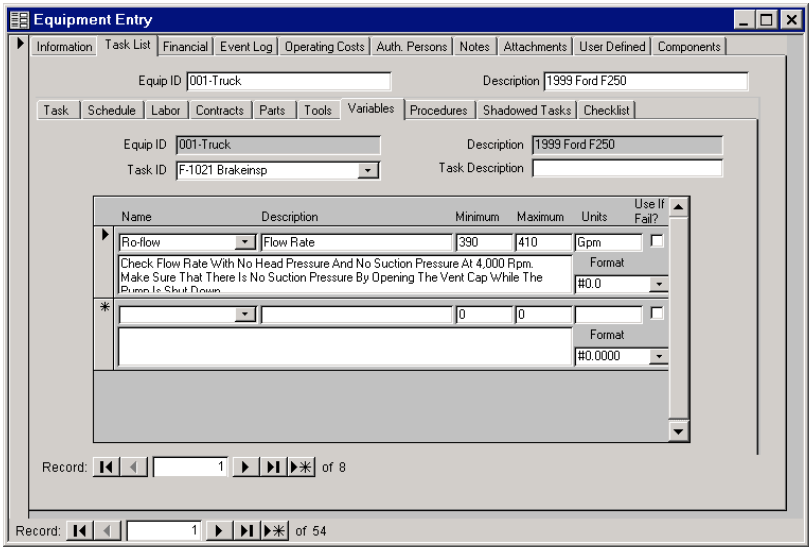
Equipment Entry—Task List—Tools



Field Name	Description
Task ID	This field shows the Task ID for the current task.
Tool ID	Select the ID for each tool you need for this equipment task.
Equip Description	This field shows a brief description of the tool that you select.
Tool Type	The type of tool is shown in this field.
Current Location	The tool's current location will appear in this field.

Equipment Entry—Task List—Variables

You can edit all of the variable information (except the variable name) on this screen, modifying each according to the task. For more information on variables, see *Variable Records*, beginning on page 145.

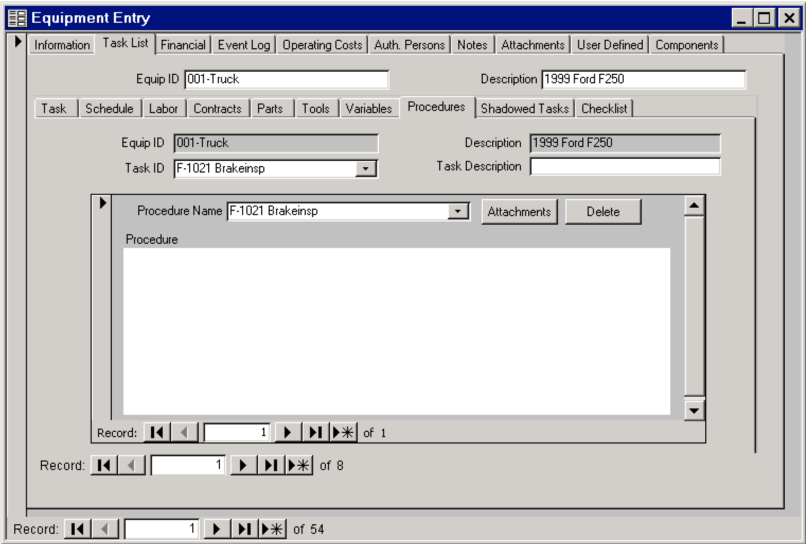


Each of the fields in this screen is explained below.

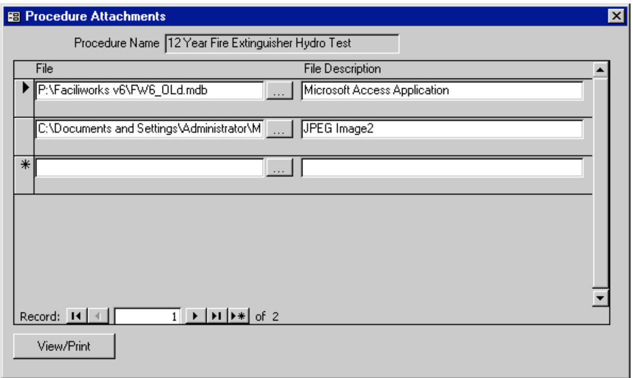
Field Name	Description
Task ID	This field shows the Task ID for the current task.
Name	Enter or select the name of the variable that the technician should check.
Description	Enter a description of the variable.
Minimum	Enter the minimum test parameter for the variable. For example, if the variable is temperature, enter the lowest acceptable temperature for the task.
Maximum	Enter the maximum test parameter for the variable.
Units	In the field on the right of *Maximum*, enter the units you are measuring. This could be *degrees* for the previous example, *inches*, *foot-pounds*, *rpm*, *mAmps*, *quarts*, *psi*, or any other way of measuring the job conditions.
Use if Fail?	Check in this box if you can use the equipment and complete the task even if the conditions specified for the variable are not met.
Comments	Enter any other pertinent information, such as instructions for testing the variable.
Format	Select a number format for the minimum and maximum values.

Equipment Entry—Task List—Procedures

In the **Procedures** screen, you can select one or more previously entered procedures that apply to the task. The navigation arrows are used to view additional procedures, if any. To select an additional procedure, go to the last record, then click the right navigation arrow. A blank screen will appear, ready for you to select another procedure name from the list of procedures.



If you have a file attached to a procedure, click the **Attachments** button to view the attachment list.

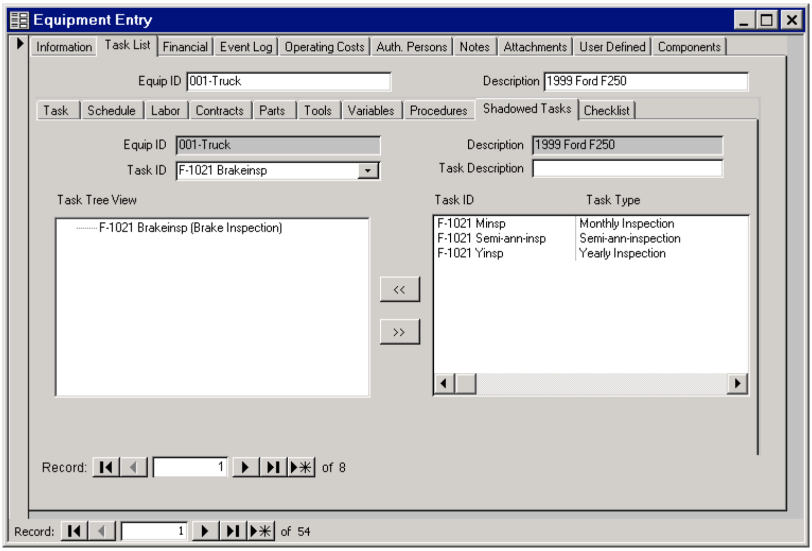


Use the **Browse** button on the right of the **File** field to select a file using the Window's built in file locator dialogue box.

For instructions on entering procedure records, please see **Procedure Entry** on page 139.

Equipment Entry–Task List—Shadowed Tasks

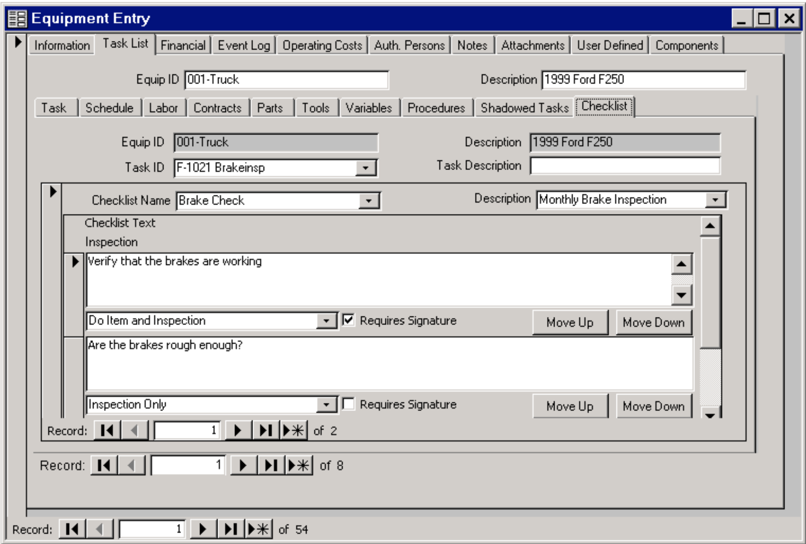
When task shadowing is employed, the completion of one task automatically marks other tasks as complete. The shadowing task includes all the work of the other task. When the shadowing task is completed, it automatically updates the date done, meter done, date due, and meter due of the shadowed task. The shadowed task is the task that is included in the shadowing task. The shadowed task's date done, meter done, date due, and meter due are automatically updated when the shadowing task is done. Shadowing only applies to the same piece of equipment. For example, a task for Equip 001 cannot shadow or be shadowed by tasks for Equip 002.



Equipment Entry–Task List—Checklist

A checklist is a user-defined set of points that must be checked to complete a task. You must enter records for checklists in **Checklist** before you can assign them to equipment task records. For further information, see *Chapter 6: Checklists* on page 105. After you have created a checklist, you can return to **Equipment Entry—Task List—Checklist** to assign it to the desired task.

The records in this details section are sorted by descending line number. The **Requires Signature** checkbox should be checked if a signature is required before sign-off.



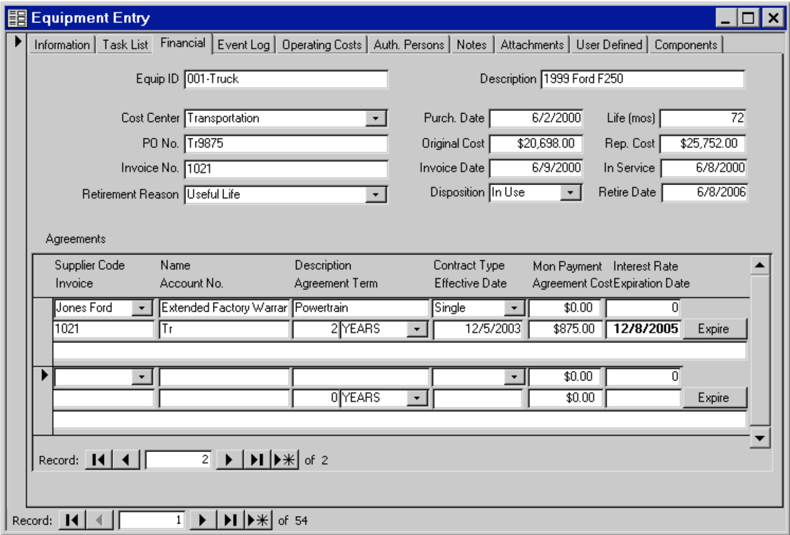
The fields and buttons in this screen are explained below:

Field Name	Description
Task ID	This field shows the Task ID for the current task.
Checklist Name	This field shows the name of the current checklist.
Description	This field shows the description of the current checklist.
Checklist Text	Enter text for the checklist item; as you do a blank for a second checklist item will appear below it.
Inspection	Choose Do Item Only, Inspection Only, or Do Item and Inspection from the drop-down list.
Requires Signature	Check this box to require an electronic signature on this checklist item before a work order containing this checklist can be completed.
Move Up; Move Down	Click on these buttons to move the checklist item up or down in the checklist as required.

A checklist assigned to a particular task can be edited in **Equipment Entry—Task List—Checklist**; however, changes made here will not affect the checklist anywhere else it appears. If you wish to change a checklist globally you must edit it in **Checklist** under the **Main Records** menu.

Equipment Entry-Financial

Use this screen to enter financial information for each piece of equipment. This information can be used to track purchase records and contract agreements.

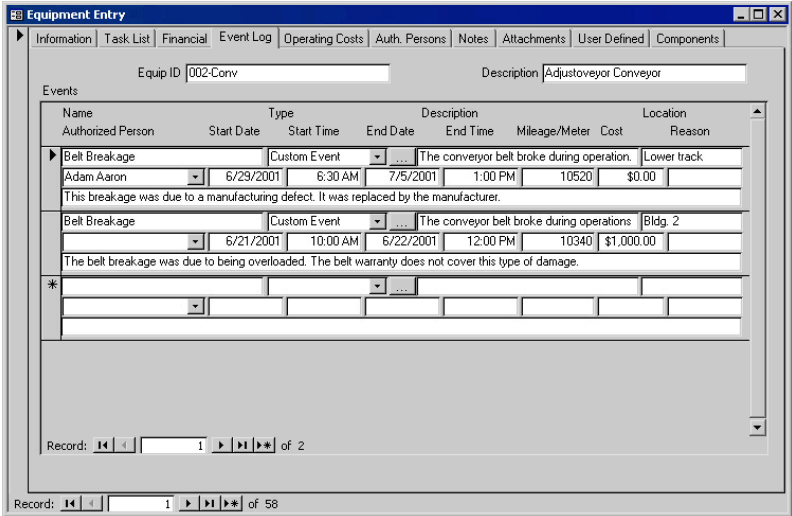


Field Name	Description
Equip. ID; Description	The current record's equipment ID and description appear in these fields.
Cost Center	Enter a specified cost center for financial reports grouping.
PO No.	Enter the Purchase Order number
Invoice No.	Enter the Invoice number
Retirement Reason	Enter the reason for retiring equipment
Purchase Date	Enter the purchase date
Original Cost	Enter the original cost to the equipment
Invoice Date	Enter the Invoice date
Disposition	Indicate here when the equipment is in use.
Life	Enter the number of months of the equipment's useful life
Rep. Cost	Enter the replacement cost of the equipment
In Service	Enter the date the equipment was put into service

Field Name	Description
Retire Date	Enter the date the equipment is to be retired
Agreements	Enter terms and contract information and other relevant information on any maintenance agreements or other contracts pertaining to the equipment.
Supplier Code	Enter the name of the supplier or pick a supplier from the drop-down list.
Invoice	Enter the invoice number for the service agreement.
Name	Enter the title of the service agreement.
Account No.	Enter the account number on the service agreement.
Description	Enter a description of what the service agreement covers.
Agreement Term	Enter the term of the agreement in months or years.
Contract Type	Pick the type of contract from the drop-down list or enter a type.
Effective Date	Enter the date the agreement went into effect.
Mon. Payment	Enter the monthly payment amount specified in the agreement.
Agreement Cost	Enter the total cost of the agreement.
Interest Rate	Enter the interest rate specified in the agreement.
Expiration Date	Enter the expiration date specified in the agreement.
Expire	Click this button to automatically compute the expiration date of the agreement, based upon the date entered in *Effective Date* and the term entered in *Agreement Term.*

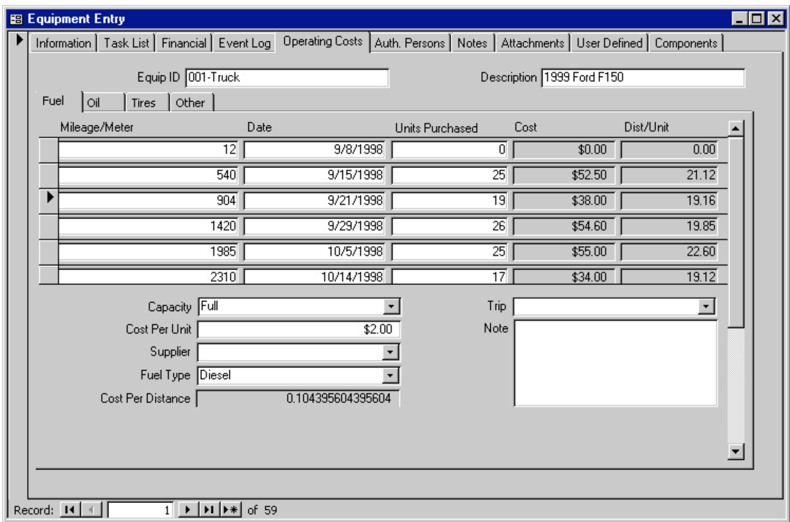
Equipment Entry-Event Log

Use this screen to enter events that happened to a particular piece of equipment. Be sure that entries in the **Name** field are unique. The event type must be selected from the drop-down list. Event types can be created or edited by clicking on the **...** button to the right of the **Type** field. The **Event Types** window will appear; you can add to or edit the list of event types here.



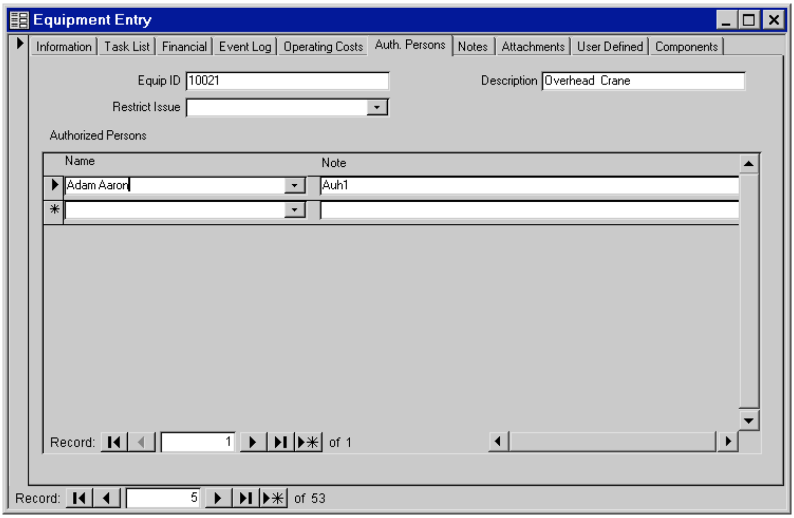
Equipment Entry-Operating Cost

Use this screen to enter equipment operating costs; this screen contains tabs where you can enter meter readings and other detailed information relating to fuel, oil, tires and other costs. Make sure that your mileage entries do not overlap and that date entries are consecutive. The entry fields below the table rows are linked to the row data, so that when you change rows, you change the set of entry fields below the table.



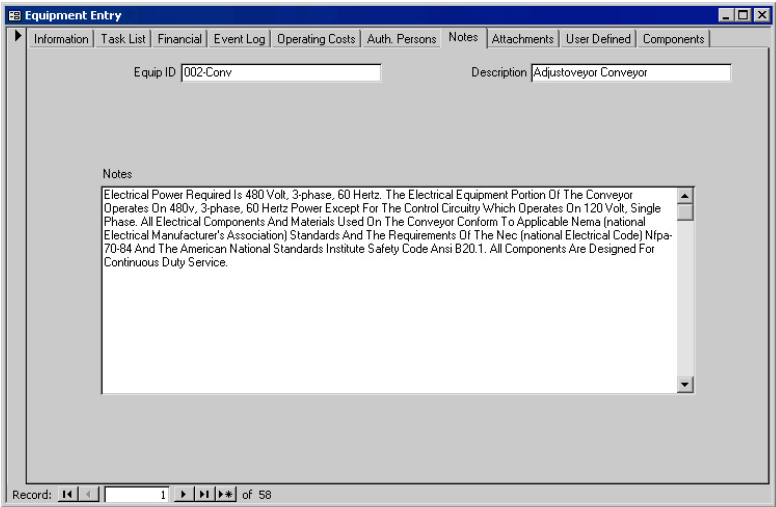
Equipment Entry-Auth. Persons

Use this screen to enter the names of persons authorized to use a piece of equipment. Use the **Restrict Issue** drop-down list to indicate whether the item may be issued to persons who are not on the **Authorized Persons** list; you may select `Restricted`, `Not Restricted`, or `Program Default`. If `Program Default` is selected, FaciliWorks will behave according to the preference selected in **Setup | Settings | Security.** (For more information, see **Settings—Security** on page 266 of the *System Administrator's Guide*.)



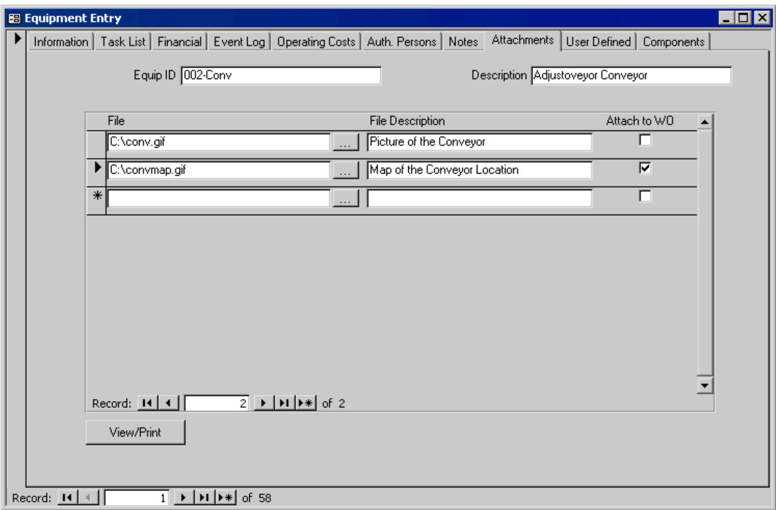
Equipment Entry-Notes

Use this screen to enter notes on a piece of equipment. There is no limit to the amount of text you can enter in the **Notes** field.



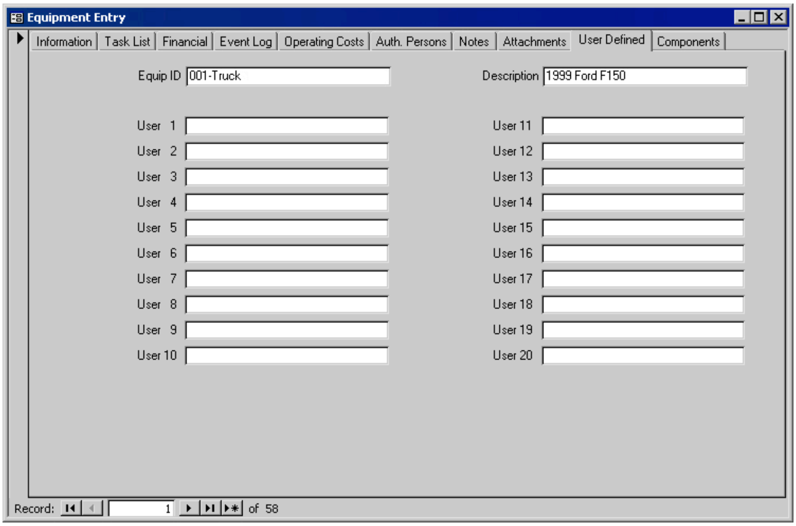
Equipment Entry-Attachments

This screen lets you attach any kind of file to your equipment record – text, images, maps, etc. You can also choose to attach a file to a work order.



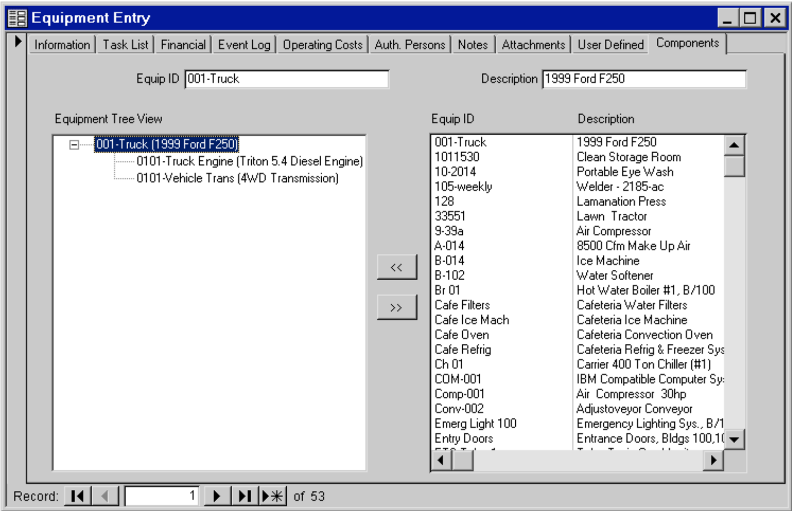
Equipment Entry-User Defined

There are 20 user-definable fields available in FaciliWorks 7. These fields can be customized, the label names changed, the field types altered, in **Setup – Settings – Interface.** To edit these field labels, close the **Equipment Entry** window to return to the Main Menu and click on the **Setup** icon on the left-hand side. Click on the **Settings** button; when the **Settings** window appears, click on the **Interface** tab. Under the **Interface** tab, click on the **Equipment Custom** tab and define the field type, label text, and font weight. Close the record to save the changes. When you return to **Equipment Entry—User Defined,** your changes will appear.



Equipment Entry-Components

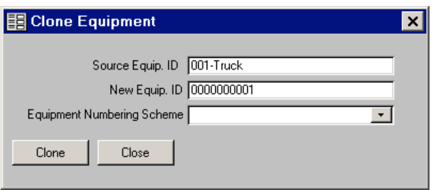
You can now visually attach or remove components to parent equipment using a tree view. Attached components affect financial reports, meter readings, and ensure that related components are always related. Select the parent component from the **Equipment Tree View** on the left; then select the child component from the **Equipment ID** list on the right. To establish the parent-child relationship, click on the ←← button; to break a parent-child relationship, click on the →→ button.



Using Equipment Records

Cloning Equipment Records

To copy an equipment record *and* its set of tasks with their variables, labor, contracts, procedures, parts, and tools, click the **Clone** button at the bottom of the **Equipment Entry—Information** screen. This window will appear:



If the type of the equipment being cloned matches one of the equipment types selected in Numbering Schemes [reference the manual page dealing with Settings | Automatic Numbering | Number Schemes], then the application will suggest the next number in the

sequence for that Numbering Scheme. Otherwise, the application will suggest the next number in the Equipment ID Numbering [reference the manual page dealing with Settings | Automatic Numbering | Equipment ID Numbering]. The user can select a different Numbering Scheme to use the automatic numbering from that scheme instead of the default scheme. The user may use the suggested Equipment ID or enter their own Equipment ID. If there is no numbering set up, then the new Equip ID control will be blank and the user must enter a new Equipment ID. Once the user has setup the New Equipment ID, click Clone to clone the equipment. To clone more equipment records, enter a new Equipment ID and click Clone again.

Click the **Close** button when you're finished. The newest cloned record will be shown in the **Equipment Entry** window.

Usage—Issue/Return Tracking Records

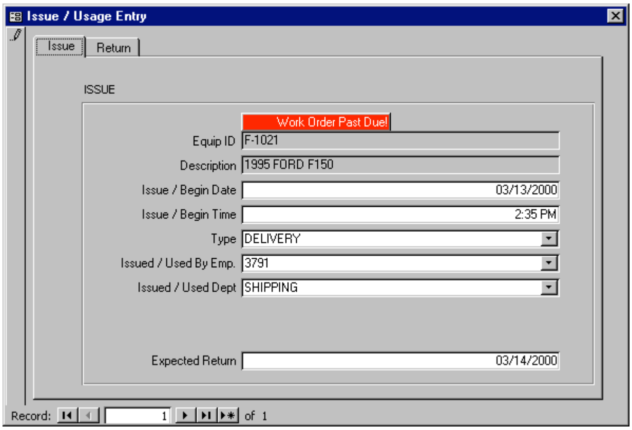
Click the **Usage** button on the **Equipment Entry—Information** screen to issue and/or return equipment. The **Issue/Usage Entry** screen will appear.

FaciliWorks lets you track all equipment issues and returns. These issue/return records are especially useful in manufacturing, where equipment, tools, or assemblies are loaned out for periods of time or assigned to a particular job, then serviced and/or returned for storage and safekeeping. By tracking this information, you can identify which employees or departments use particular pieces of equipment and how often they use them.

Another purpose of these records is to track usage days and operating cycles for equipment whose maintenance schedule is based on actual days or cycles used instead of elapsed calendar days. You must use issue tracking records when maintenance schedules for a piece of equipment are based on metered usage or cycles.

Use the **Issued/Used By** and/or **Issued/Used Department** fields to establish manufacturing traceability. For example, if you find that equipment is out of tolerance, you can immediately generate a recall report listing all parts, assemblies, or products that you may have manufactured incorrectly.

Equipment Issue



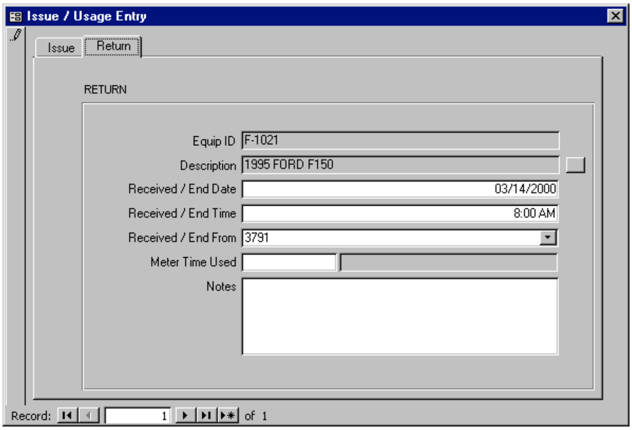
To issue equipment, click the **New Record** button. When you return the equipment, go to the **Return** tab for the **Issue** record. You cannot enter a **Return** record for equipment that doesn't have an **Issue** record. If you're re-assigning the equipment, you must create a *new* **Issue** record.

Field Name	Description
Equip. ID and Description	These fields automatically show the equipment ID and description for the current record.
Issue/Begin Date	Enter the date on which you issued the equipment to a job or the date from which you will count the current usage cycles. The current date automatically appears in this field.
Issue/Begin Time	This field shows the time at which you issued the equipment. The current time automatically displays in this field.
Type	Use the **Type** field to indicate why you are issuing the equipment. You can enter a code or a description in this field. It's important to enter this information consistently, according to your identification system, so that you can later create reports that list your equipment by the type of issue. When you enter a code or description, FaciliWorks adds it to the *Type* drop-down list so you can select what you have entered from the list later. Some examples of type include milling, grinding, delivery, production, assembly, inspection, packaging, cost center, plant, job number, or customer name.
Issued/Used by Emp.	Enter the name of the employee who is responsible for the equipment.
Issued/Used Dept.	Enter the name of the department, job number, or customer that will require the equipment.
Expected Return	Enter the estimated date on which the borrower will return the equipment.

When equipment is issued, FaciliWorks fills in the **Issue/Begin Date** and **Issue/Begin Time** fields automatically; however, you may edit these fields if necessary. FaciliWorks also

automatically modifies the **Current Location** field in the equipment record; the modified description consists of the **Issued/Used By Emp.** field, then a slash character, then the **Issued/Used Dept.** field, separated by a slash character (e.g., "*3791/Shipping*").

Equipment Return



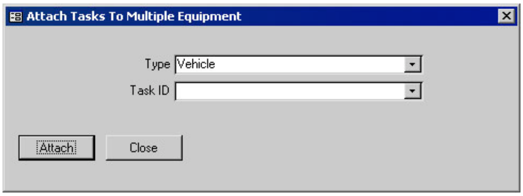
To return equipment, go to the original issue record and click on the **Return** tab. The fields in this screen are explained below.

Field Name	Description
Received/End Date	Click the button on the right side to enter the current date, or enter the date on which the borrower returned the equipment.
Received/End Time	You can use the current time in this field (automatically entered when you click the button next to **Received/End Date**) or enter a different time.
Received/End From	Select the person, department, or company returning the equipment from the drop-down list. If the name isn't on the list, enter it here. When you enter a name in this field, FaciliWorks adds it to the *Received/End From* drop-down list so you can select what you have entered from the list later.
Meter Time Used	Enter the number of times the borrower used the equipment while it was issued.
Notes	Enter any special information regarding the equipment or its use.

FaciliWorks assumes you want to return the equipment (that is, complete the issue tracking record) if the equipment has an incomplete current record. After you save the **Issue/Usage** record, FaciliWorks automatically changes the equipment record's **Current Location** to its **Storage Location.**

Attach Tasks

When you click the **Attach Tasks** button on the **Equipment Entry—Information** screen, you'll see this window:



This window shows the equipment type of the current record (you can select a new type, if needed). Select a task ID from the drop-down list, then click the **Attach** button to assign this task to every equipment record of this equipment type.

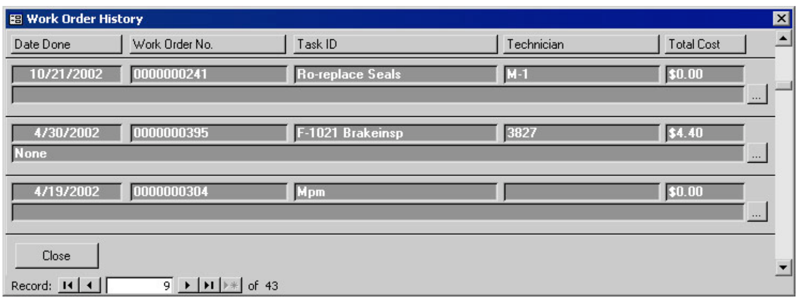
Graph of Equipment Downtime

To view or print an **Equipment Downtime** graph, click on the **Graph** button on the **Equipment Entry–Information** screen. By default, FaciliWorks will graph the entire downtime history for the equipment. If you want to see a specific date range, close the **Equipment Entry** window to return to the Main Menu; then click on the Graphs icon on the left-hand side. You'll see a listing of graphs; click on **Equipment Graphs**, then on **Equipment Downtime.** A graph filter window will appear; enter the desired dates and pick the **Equipment ID** from the drop-down list. For more information, see *Chapter 17: Graphs*, beginning on page 209.

To print a graph, click on the **Print** button in the toolbar or select **File | Print** from the menu bar; to preview the graph before you print, click on the **View** button.

Viewing Work Order History

To check the work order history for any of your equipment, go to **Equipment Entry,** select the equipment ID, then click the **History** button. A screen like this one will appear.

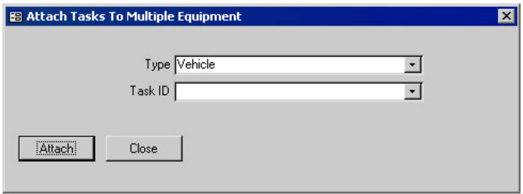


This screen displays a summary of the equipment maintenance history for a single piece of equipment; it's designed for viewing purposes only. Select **Work Order History** from the **Historical Work Order Reports** in the **Reports** menu to create and print detailed and filtered reports

(see page 195 for more information). You can go to the **Work Order View** by clicking on the **...** button at the right of each record.

Attach Tasks

When you click the **Attach Tasks** button on the **Equipment Entry—Information** screen, you'll see this window:



This box opens showing the equipment type of the current record (you can select a new type, if needed). Select a task ID from the list, then click the **Attach** button to assign this task to every equipment record of this equipment type.

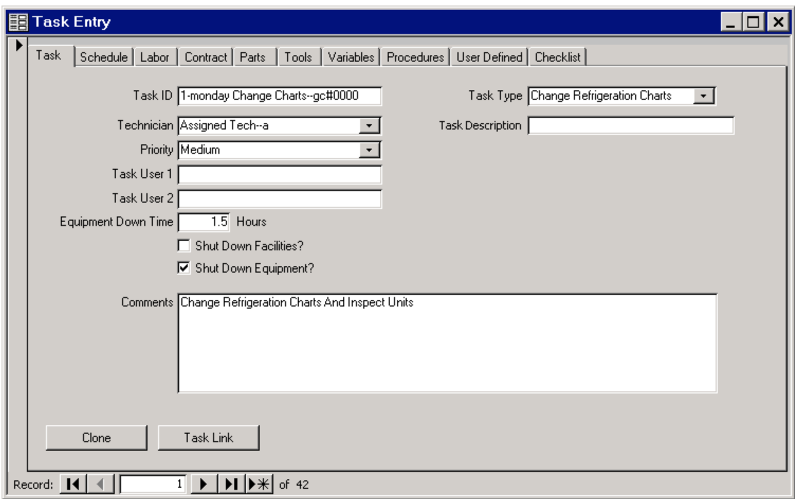
Work Order

Click on this button to view work orders relating to that specific piece of equipment.

Chapter 5: Task Records

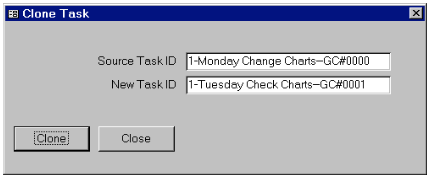
Within an equipment record, you can enter or edit tasks that are associated exclusively with that piece of equipment. However, you can independently create and modify tasks through **Task Entry** from the **Main Records** menu. Any task that you enter in **Task Entry** will be available for any piece of equipment. We recommend that you always enter tasks through **Task Entry** so that you can keep track of tasks independently of equipment.

The **Task Entry** screens are similar to the **Equipment Entry—Task List—Task** screens. To enter task records in this screen, follow the instructions given in *Chapter 4: Equipment Records,* beginning on page 71.



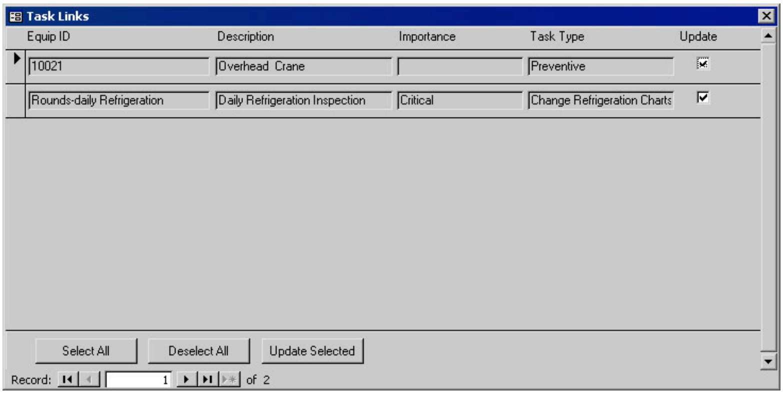
Cloning Tasks

Click the **Clone** button to create a new task record based on the current record.



In the **Clone Task** window, a new task ID, then click **Clone** to create the task. Click **Close** to exit this window without cloning the task record.

Task Link

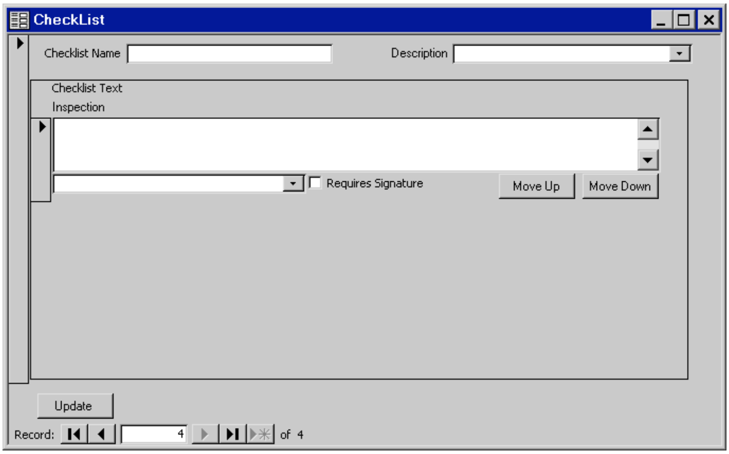


If you change a task record, you can automatically update associated equipment records by clicking the **Task Link** button. The **Task Links** screen displays a list of every piece of equipment that uses this task. Place a checkmark in the **Update** box for each equipment record that you want to update (click **Select All** to update all of the records). Next, click **Update Selected**: FaciliWorks will automatically update the selected equipment records with the revised task information.

Chapter 6: Checklists

To create and edit checklists, go to the Main Menu; click on the **Main Records** icon on the left-hand side of the window, then click on the **Checklist** button to display the **CheckList** form.

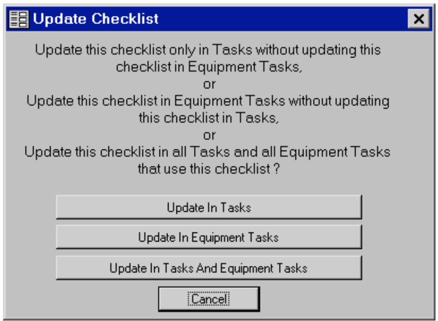
To create a new checklist, click on the **New Record** button.



The fields and buttons in this screen are explained below:

Field Name	Description
Checklist Name	Enter a unique name for the checklist.
Description	Enter a description for the checklist, or choose an existing description from the drop-down list.

Field Name	Description
Checklist Text	Enter text for the checklist item; as you do a blank for a second checklist item will appear below it.
Inspection	Choose *Do Item Only, Inspection Only,* or *Do Item and Inspection* from the drop-down list.
Requires Signature	Check this box to require an electronic signature on this checklist item before a work order containing this checklist can be completed.
Move Up; Move Down	Click on these buttons to move the checklist item up or down in the checklist as required.
Update	Click on this button to update the checklist. A dialog box will appear:



Click *Update in Tasks* to update the checklist in **Tasks** but not in **Equipment Tasks;** click *Update in Equipment Tasks* to update the checklist in **Equipment Tasks** but not in **Tasks**; click *Update in Tasks and Equipment Tasks* to update the checklist in both. Click Cancel to return to the *CheckList* screen without updating.

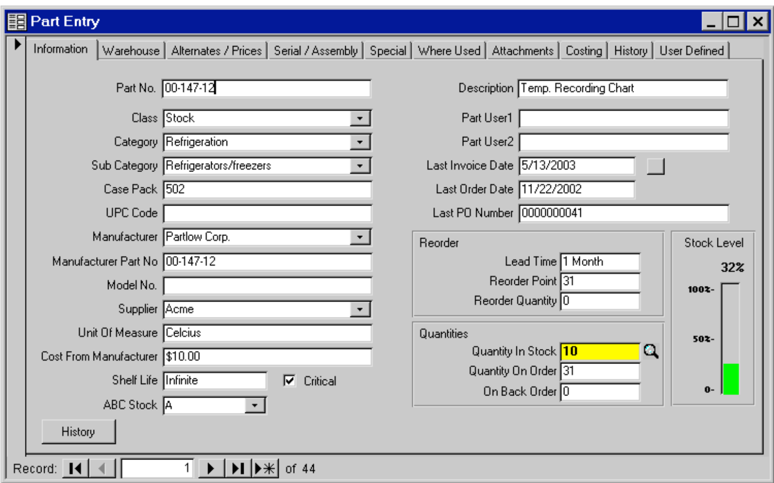
Chapter 7: Inventory

In the **Inventory** menu, you can track your inventory of parts and create purchase orders.

Part Entry

With **Part Entry**, you can easily maintain up-to-date inventory records for your supplies. You can also track the costs of parts and supplies that you use during maintenance.

Part Entry—Information



The following table explains the fields in the **Part Entry—Information** screen:

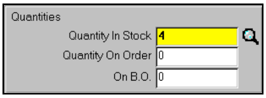
Field Name	Description
Part No.	Enter a unique alphanumeric identification code for each part.
Description	Enter a brief description of the part.
Class	Parts can be classified according to ordering, stocking, or job assignment policies.
Category	Parts can be categorized for ease in grouping in reports and graphs.
Sub Category	Categories can be divided into subcategories to help you sort parts in reports and graphs.
Case Pack	Enter how many parts a typical package or shipment contains. For example, enter the number of items per case—*12-pack, 24-pack,* or *96-pack carton.*
UPC Code	Enter the UPC code assigned to this part.
Manufacturer	Enter the name of the manufacturer of this part or select it from the drop-down list.
Manufacturer Part No.	Enter the manufacturer's part number. Your printed purchase orders will show this number instead of your internal part number. However, if you leave this field blank, your POs will show your company number.
Model No.	Enter the part's model number, if applicable.
Supplier	Enter the name of your supplier for this part or select it from the drop-down list.
Unit of Measure	Enter the unit by which you usually purchase the part, such as *each, dozen, carton, 3-pack, 6-pack, gallons, pound, case,* or *gross.*
Cost from Manufacturer	Enter the current price for the part.
Shelf Life	If the part is perishable or will soon be obsolete, enter its shelf life.
Critical	Place a check in this box to indicate that this part is critical.
ABC Stock	ABC Stock items fall into the following categories: "A" items are expensive to keep on hand, but are critical items. You would keep a small number of these on hand, but manage the stock level closely. **Note: If you select A from the drop-down list, FaciliWorks will automatically check the *Critical* checkbox.** "B" items are not very expensive to keep on hand, but are still required. You would keep a moderate amount of parts in stock, but would not monitor the stock level closely. "C" items are inexpensive parts that may not be critical. You would keep a large number of these parts on hand, but would not monitor the stock level closely.
Part User 1; Part User 2	Use these custom fields to track additional information. Your system administrator may have renamed these fields; see *Changing Field Labels in FaciliWorks* on page 273 of the *System Administrator's Guide* for more information.
Last Invoice Date	Enter the last inventory date. Click the button to the right of this field to automatically insert today's date.
Last Order Date	In this field, enter the date on which you last ordered the part.
Last PO Number	Reference the PO number for the last order.

Reorder

Field Name	Description
Lead Time	In this field, enter the estimated lead time for the part.
Reorder Point	Enter the minimum amount that you should have in stock before you reorder this part.
Reorder Quantity	Next, enter the number of parts to order. The total quantity to order will be the difference between the quantity in stock and the reorder point, plus this field. (*Quantity in Stock – Reorder Point*) + *Reorder Quantity* = Total Amount to Order

Quantities

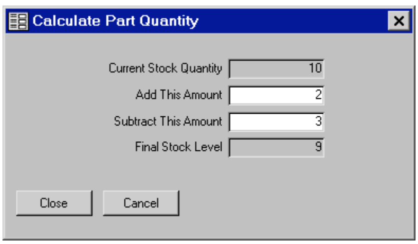
This section displays information about the current inventory level for this part.



Field Name	Description
Quantity in Stock	This field shows your current inventory of this part. To change this amount, see the instructions below.
Quantity on Order	Based on your purchase order records, this field shows the quantity currently on order. You can edit this number.
On B.O.	If any of the parts are on backorder, this window shows that amount (based on your purchase order records). You can edit this number.
Stock Level	This field gives you a quick visual graph of the current quantity in stock.

Changing the Quantity in Stock

If the **Quantity in Stock** amount is incorrect, double-click on it; the **Calculate Part Quantity** window will appear.

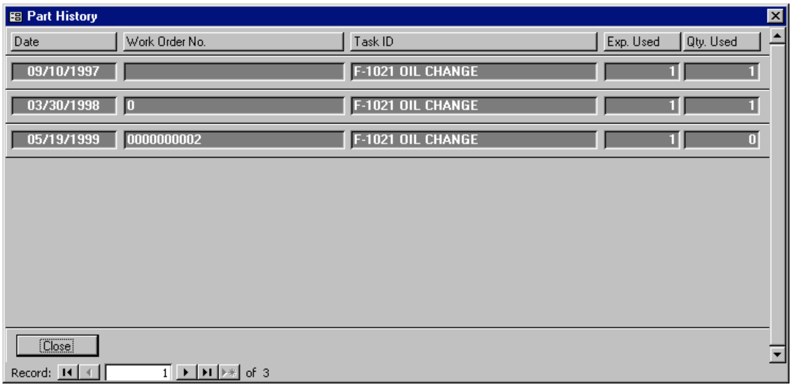


In the designated fields, enter the amount of parts that you need to add or subtract. FaciliWorks will calculate the new total and display it in the **Final Stock Level** field. If you want to use this amount, click the **Close** button. If you decide not to change the **Quantity in Stock** amount, click the **Cancel** button.

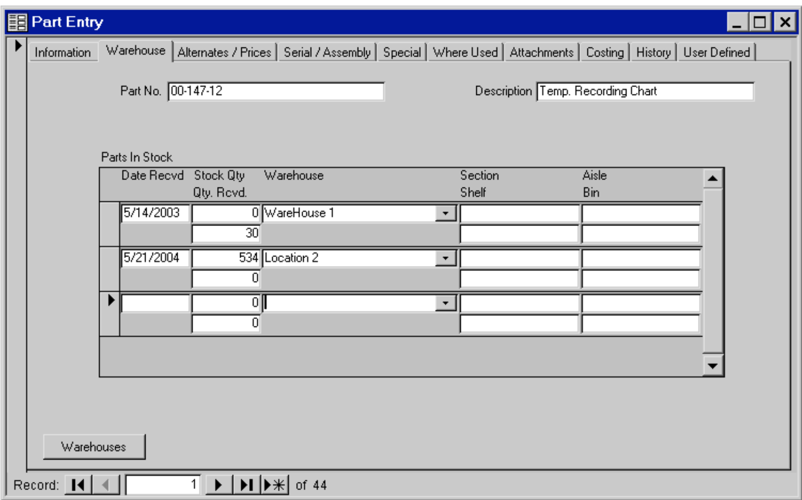
If you click **Close**, another message will appear, detailing the part number, current amount in stock, and the new amount in stock. Click **Yes** to accept the new amount. FaciliWorks will update the **Quantity in Stock** field and close the screen. If you click **No** (i.e., don't accept the new amount), **Quantity in Stock** will remain at the current level. The **Calculate Part Quantity** screen will remain open.

History

The **Part Entry—Information** screen also includes a history record. Click the **History** button to display it. Both open and completed work orders that use this part appear on the **Part History** display.



Part Entry—Warehouse

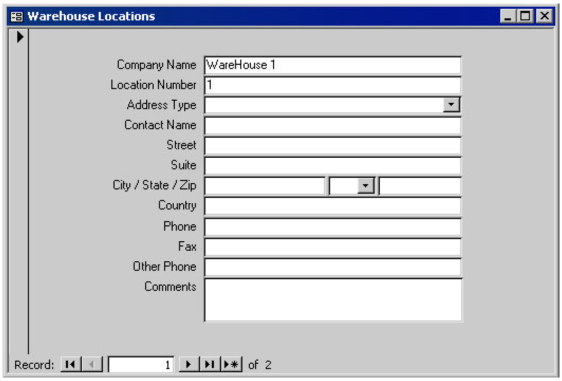


In the **Part Entry–Warehouse** screen, you can track all of your parts in inventory. When parts come in, enter the quantity and storage information. From the **Reports** menu, you can then produce an inventory report sorted by part number or location. By selecting one of several options from the **Graphs** menu, you can see this information in a graph.

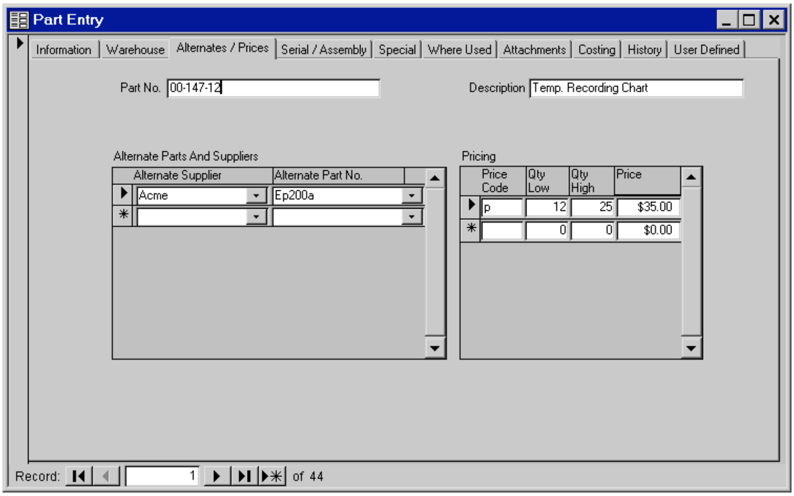
The table below describes the fields in this screen.

Field Name	Description
Part No. and Description	These fields show the ID and description for the current record (as entered in the **Information** screen).
Date Recvd.	Enter the date on which you received the order.
Stock Qty.	Add the number of new parts received to the quantity already in stock. Then, in this field, enter the new total number of parts.
Qty. Recvd.	Enter the number of parts received.
Warehouse **and** Warehouses **button**	Select the location for the part. If the location you need isn't on the list, click the **Warehouses** button to add a new warehouse—see below.
Section, Shelf, Aisle, **and** Bin	Specify the exact storage location for this part in these fields

When you click the **Warehouses** button, this screen will appear. Here, you can enter information for the new warehouse. Click **Close** to return to the **Warehouse** screen.



Part Entry—Alternates/Prices



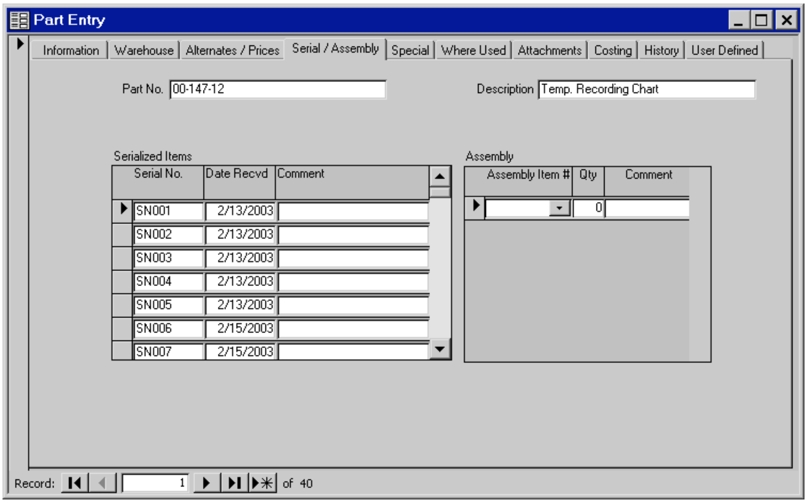
In the **Alternates/Prices** screen, enter the numbers and suppliers of other parts that you can substitute for this part.

In the **Pricing** section of this screen, identify your part pricing by assigning a code to different purchasing options. For example, you might identify a minimum purchase price code. You can also use special codes to identify the lowest price, highest price, or optimum quantities for your needs. Your code system could indicate the best price for this part or the smallest order quantity. You could also use the code to reflect a particular product or location number.

The table below lists each of the fields in this screen.

Field Name	Description
Alternate Supplier	Use the drop-down list to select an alternate supplier for the part.
Alternate Part Number	Select a substitute part from the drop-down list.
Price Code	Enter a price code in this field (maximum of ten characters).
Qty. Low	If applicable, enter the minimum purchase quantity to qualify for special pricing or discounts.
Qty. High	Enter the maximum purchase quantity to qualify for special pricing or discounts.
Price	In this field, enter the price for the quantity specified.

Part Entry—Serial/Assembly



In the **Serial/Assembly** screen, enter serial number and assembly number information about this part. Each of the fields in this screen is described below.

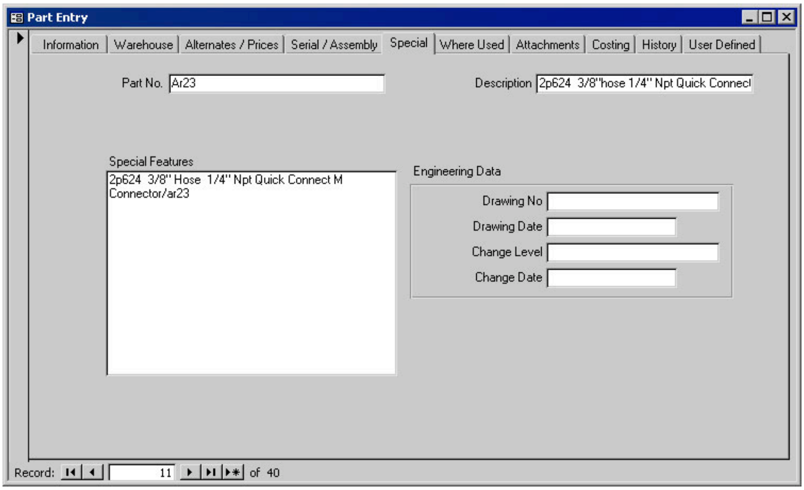
Serialized Items

Field Name	Description
Serial No.	If you track parts by serial number, enter that information here.
Date Recvd	Enter the date on which you received the part.
Comment	Enter information regarding this particular serial number record.

Assembly

Field Name	Description
Assembly Item #	If you track parts by assembly number or name, enter that information here.
Qty	Enter the quantity of parts for the assembly item.
Comment	Enter comments about the assembly item or part.

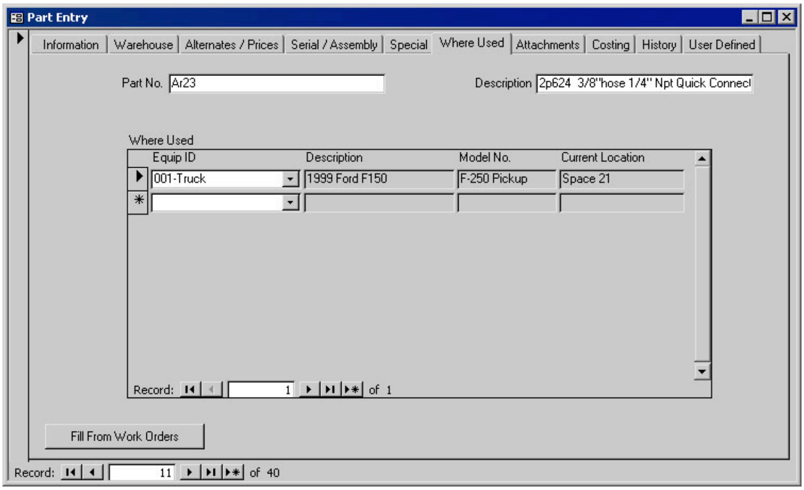
Part Entry—Special



In this screen, you can store special information about the part. This table explains each field.

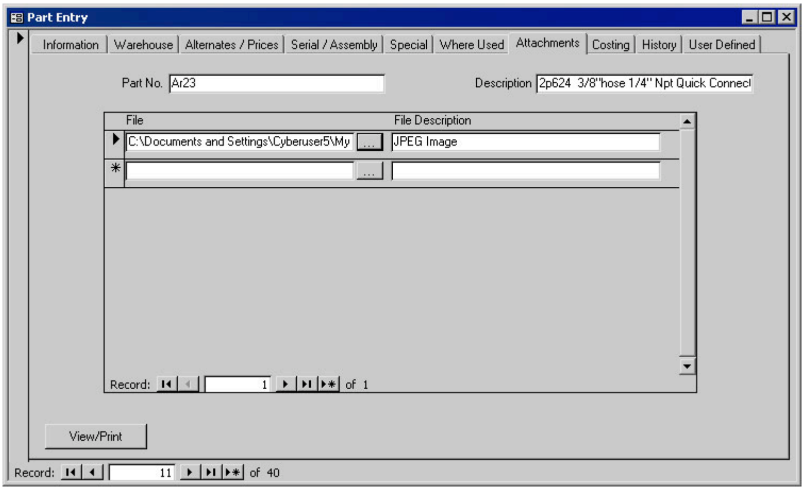
Field Name	Description
Special Features	Enter any distinctive characteristics of this part.
Drawing No. and Drawing Date	If applicable, enter the drawing number for this part, then enter the date of the original drawing.
Change Level and Change Date	Enter the current change level characters that identify the current drawing, then enter the date of the most recent drawing change level for this part.

Part Entry—Where Used



In this screen, you can create a list of equipment for which you use this part. When you select an equipment ID, the equipment's description, model number, and current location will automatically appear in the appropriate fields. You can't change this information in this screen. Click the **Fill from Work Orders** button to add equipment from completed work orders to this list. This feature is useful if you need to scavenge a part from a non-critical piece of equipment and use it until you receive a new part.

Part Entry—Attachments



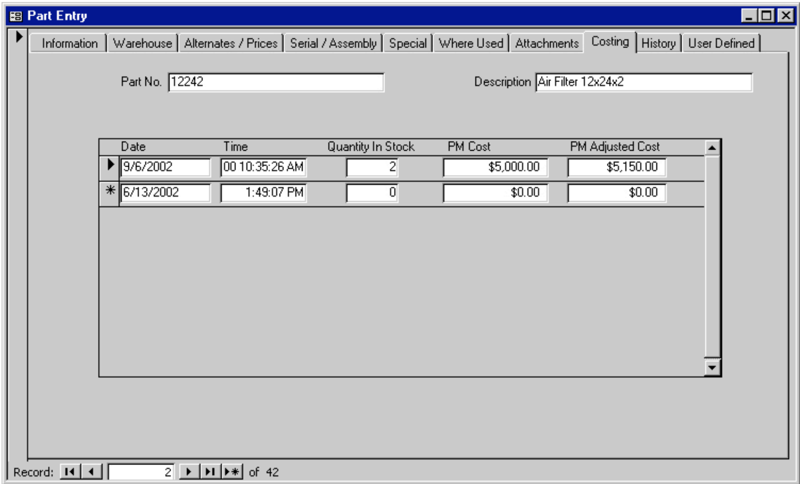
You can attach pictures, maps, other drawing objects, or any other file to parts in the **Attachments** screen. Type a file path and name into the **File** field or click **...** to browse through your directories to find a file. There is no limit to the number of files you can attach. To view or print attached files, click on the **View/Print** button.

The following table describes each field and button in this screen:

Field/Button Name	Description
File	To attach a file, enter its file path and name or click on the ... button to browse to the file.
File Description	FaciliWorks automatically enters the file type of the attached file. This field can be edited if necessary
View/Print	Click on this button to open the file for viewing or printing. FaciliWorks will open the file with the Windows default file type settings as registered. If no match is found, you will be prompted to select an appropriate program.

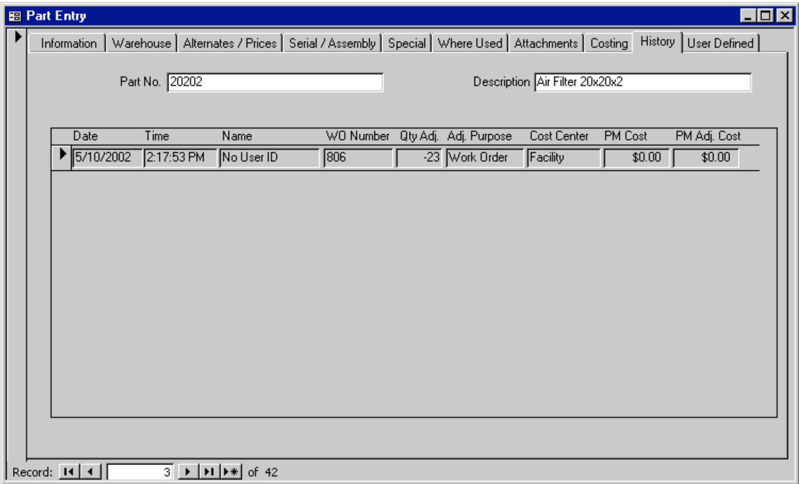
Part Entry—Costing

Costing is a record of all of the various cost levels of the part. There will be multiple records here if they are using LIFO or FIFO, one record for weighted average. What this does is keeps track of the date and number and cost of each set of parts. If a set of parts comes in at the same cost as the previous set, the quantity is added to the previous set. If the cost is different, then a new record is created with the new cost. If they are using weighted average, then the new parts are averaged in the existing record. They are weighted by the number of parts already in stock and the number of parts in the new set. Essentially, this is a cost history for all parts.



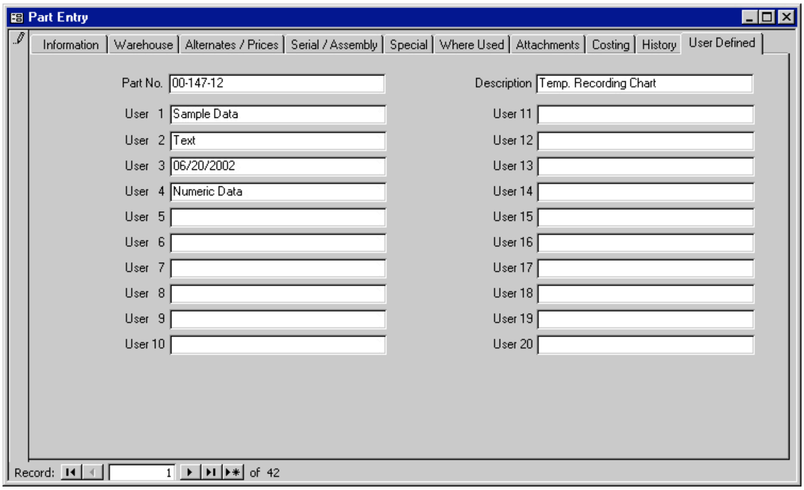
Part Entry—History

This window shows a record of every change that is made to the inventory level. It may be useful to think of **Part Entry—History** as an audit log that is specific to part quantities only.



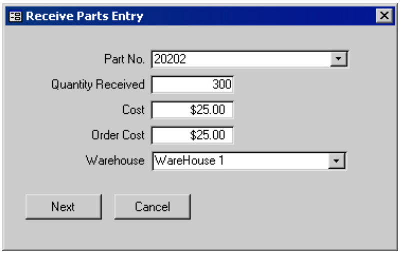
Part Entry—User Defined

These fields can be customized, the label names changed, the field types altered, in **Setup – Settings – Interface**. Close the **Part Entry** window to return to the Main Menu; click on the **Setup** icon at the left-hand side. Click the **Settings** button; when the **Settings** window appears, select the **Interface** tab. Select the Parts Custom tab and define the field type, label text, and font weight. Close the record to save the changes.



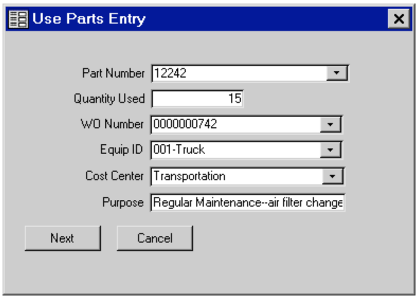
Receive Parts

Record received parts with this screen to update your part inventory record. The warehouse you specify is the storage location for the part received.



Use Parts

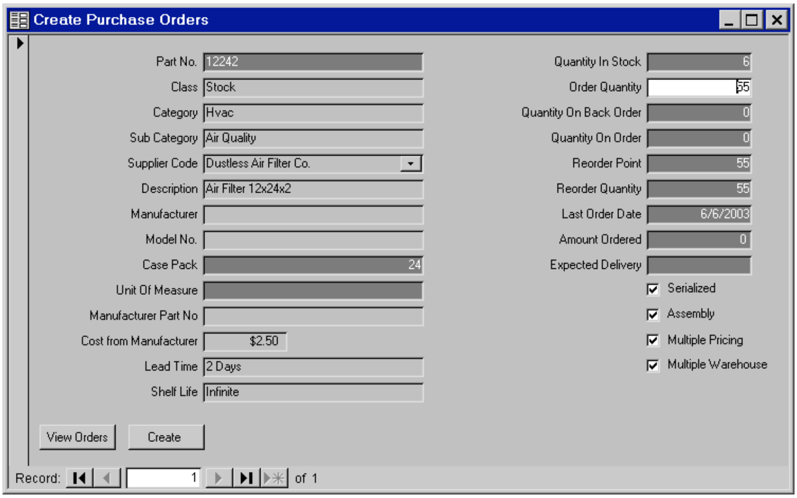
After parts are pulled from inventory and used in a piece of equipment, you must update your inventory record accordingly. Use this screen to enter the part number and quantity used, the Equipment ID for the piece of equipment the parts were used in, the cost center responsible for the piece of equipment, and a brief description of the purpose.



Create Purchase Orders

FaciliWorks uses the inventory information stored in its database to automatically create purchase orders. When the quantity in stock of a part falls below the reorder point entered in **Part Entry**, you can use **Create Purchase Orders** to quickly enter a new purchase order based on information you have entered in **Part Entry, Supplier Entry**, and elsewhere in your FaciliWorks database.

To create a purchase order, return to FaciliWorks' Main Menu and click on the **Inventory** icon on the left-hand side of the screen. Then, click on **Create Purchase Orders**. If you have parts that need to be ordered, a **Create Purchase Orders** screen similar to the one below will appear:



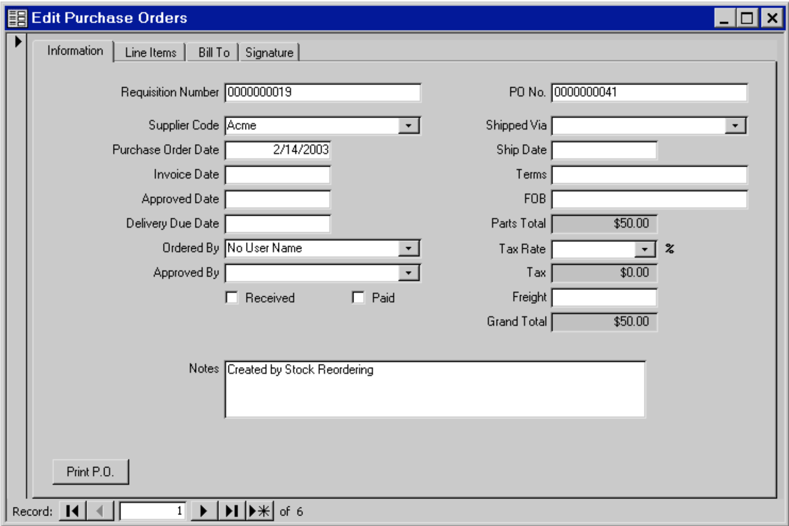
Note: If all the parts you have in stock are above their reorder threshold, FaciliWorks will notify you that you have no parts that need to be ordered and this screen will not appear.

You may edit the **Order Quantity** in this screen; except for **Order Quantity**, none of the information on this screen is editable. To view purchase orders, click the **View Orders** button. Click the **Create** button to automatically complete the creation of the purchase order.

Use the navigation arrows at the bottom of the screen to see all of the parts that you need to order.

Edit Purchase Orders

Edit Purchase Orders—Information



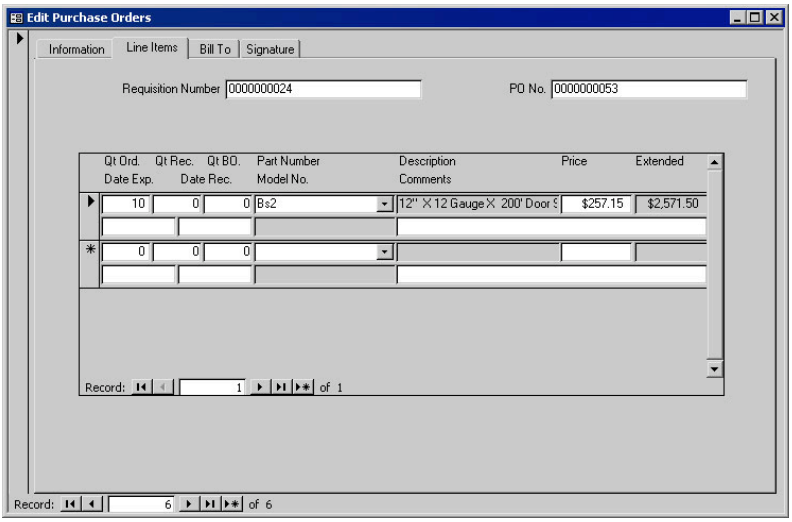
The **Purchase Order Statement** from FaciliWorks' **Settings** screen will appear on all of your purchase orders. See *Settings—User Information* on page 262 of the *System Administrator's Guide* for more information.

The table below describes the fields in the **Purchase Order Entry—Information** screen.

Field Name	Description
Requisition Number	FaciliWorks creates the requisition number for you. The format for this number is based on the format specified in the **Settings—Automatic Numbering** screen; see page 270 of the *System Administrator's Guide* for more information.
PO Number	FaciliWorks also creates the purchase order number for you, based on the purchase order number format specified in **Settings—Automatic Numbering**.
Supplier Code	Select or enter or the code of the supplier.
Purchase Order Date	Enter the date of the order.
Invoice Date	Enter the invoice date for this order.
Approved Date	Enter the date on which your purchase order was approved.
Delivery Due Date	Enter the anticipated delivery date, if known.
Ordered By	Select or enter the name of the person, department, or location that requires the items on this order.
Approved By	Enter or select the name of the person who approved this purchase order.
Received	Place a check in this checkbox when you receive the order,

Field Name	Description
Paid	Place a check in this box when your accounting department pays the invoice for the order.
Notes	Enter any notes that should appear on the purchase order.
Shipped Via	Enter or select the shipping method.
Ship Date	Enter the date on which the supplier shipped the order.
Terms	Enter the payment terms for the order.
FOB	Enter the location from which you must pay the freight cost.
Parts Total	Total cost of the order as calculated by FaciliWorks. You cannot edit this field.
Tax Rate	Enter or select the tax rate.
Tax	Tax on this order as calculated by FaciliWorks based on the Parts Total and Tax Rate. You cannot edit this field.
Freight	Enter any freight costs included with the order.
Grand Total	The total cost, including freight and tax. You cannot edit this field.
Print P.O.	Click on this button to see a print preview of the current P.O. If you are satisfied, print the P.O. by clicking on the printer icon in the upper left hand corner of the FaciliWorks window.

Edit Purchase Orders—Line Items



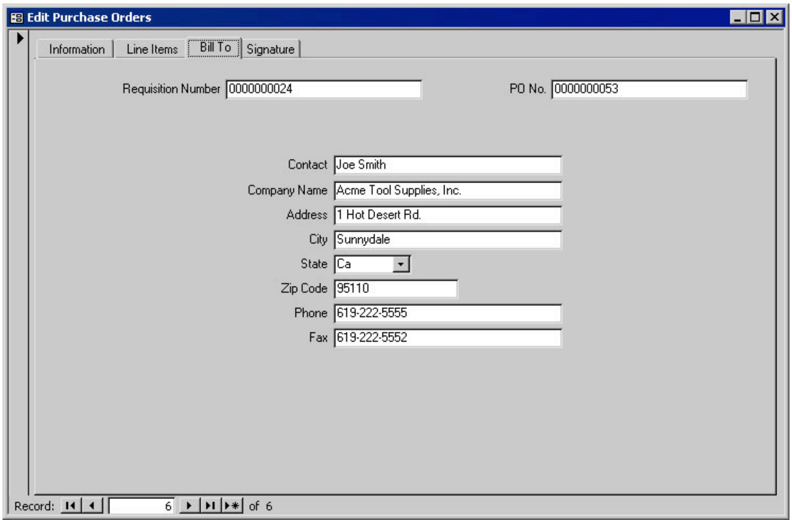
This screen shows the items you ordered. The fields in this screen are explained below.

Field Name	Description
Qt. Ord.	Enter the quantity ordered for each part,
Qt. Rec.	Enter the quantity received for each part.

Field Name	Description
Qt. BO	Enter the back ordered quantity for any back ordered items.
Part Number	Select the part number(s) you need to order (only parts already entered in **Part Entry** will appear on this list).
Description	The part description appears when you select the part number.
Price	The price per unit for the part will appear. You can edit the price if it's incorrect.
Extended	This field shows the cost for the number of parts you ordered, based on the quantity ordered and price.
Date Exp.	Enter the date on which you expect to receive this order.
Date Rec.	When you receive the shipment, enter the date in this field.
Comments	Enter any additional comments regarding this item.

Edit Purchase Orders—Bill To

The ship-to address that appears on your purchase orders is the address entered in **Settings—User Information**. If your bill-to address is different from your ship-to address, click on the **Bill To** tab to enter the bill-to address. See *Settings—User Information* on page 262 of the *System Administrator's Guide* for more instructions on entering your company information.



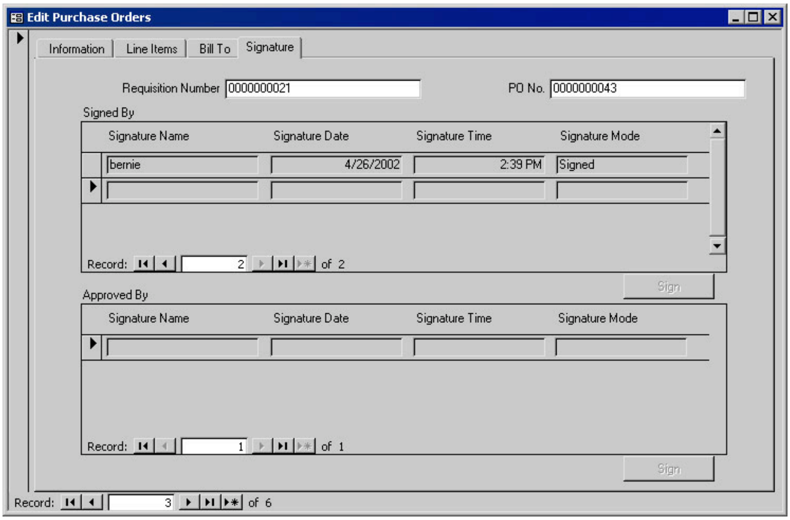
Edit Purchase Orders-Signature

To use the signature feature, you must first activate security by checking the checkbox labeled **Enable Security** under **Settings—Options**. (For more information, see *Settings—Options* on page 265 of the System Administrator's Guide.)

When you want to sign a record as completed, click the **Sign** button. This creates a new signature record containing the user's name, the date, and the exact time. (The label on the

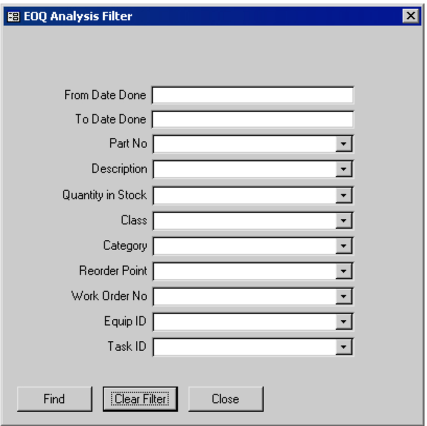
Sign button changes to **Unsign** at this time, as well.) Once it has been signed, then the **Approved By** box can be signed. Once a record has been signed, it cannot be edited by anyone. A signed record can only be made editable if the original signer unsigns it; if the record's approval has been signed, the approval must be unsigned by the person who signed it before the record can be unsigned.

> **Note: You can require users to enter their login name and password whenever they click the *Sign/Unsign* button by checking the checkbox labeled *Electronic Signature Login* under** Settings—Options. **(For more information, see *Settings—Options* on page 265 of the System Administrator's Guide.) If this option is not enabled, FaciliWorks will sign the record with the User Name of the user who is currently logged in.**

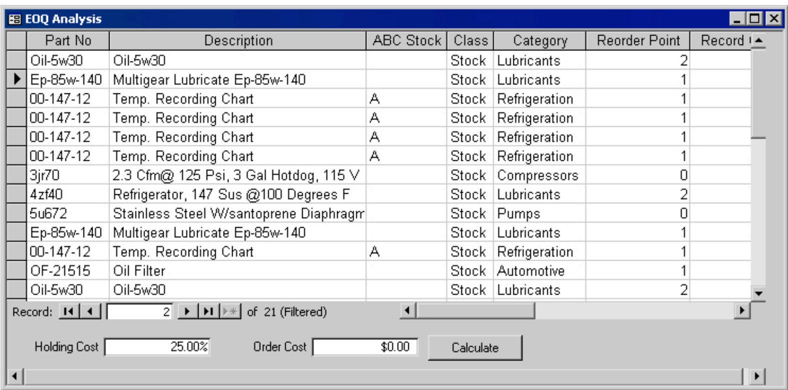


EOQ Analysis

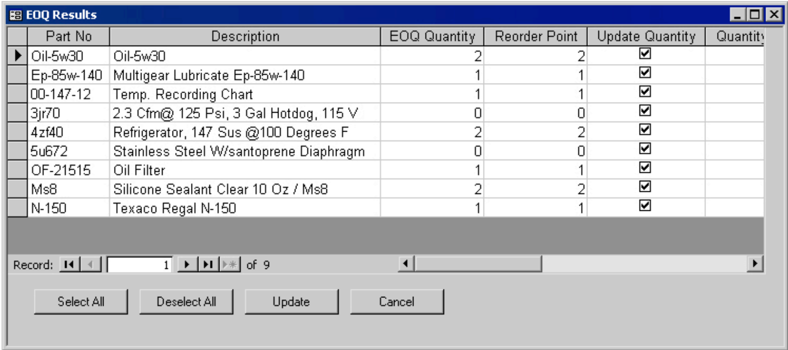
EOQ stands for Economic Order Quantity. This is a formula that helps you optimize stock levels by determining the stock level that will cost your company the least amount of money. EOQ uses the number of parts that are needed for a specified time period and compares that to the cost of ordering the parts and the cost of keeping the parts on the shelf. The screen shot shows the filter used to determine which parts are compared.



The **EOQ Analysis** window shows a list of parts to be compared. **Holding Cost** refers to how much it costs to keep a part on the shelf as a percentage of the part's purchase cost. **Order Cost** refers to the miscellaneous costs associated with buying parts, including the time it takes to create the order, shipping costs, or any costs other than the parts themselves and the taxes. These two values are the same for every part in the list. Click on the **Calculate** button; FaciliWorks will recalculate reorder points based on the figures you enter.



The **EOQ Results** window displays the current reorder point and the calculated reorder point for each part in the list. To use the calculated reorder point for future orders of a particular item, select that item by checking the item's **Update Quantity** checkbox; then click the **Update** button. To select every item in the list, click **Select All;** to deselect every item, click **Deselect All.** To close this window without modifying your FaciliWorks database, click **Cancel.**



Printing Purchase Orders

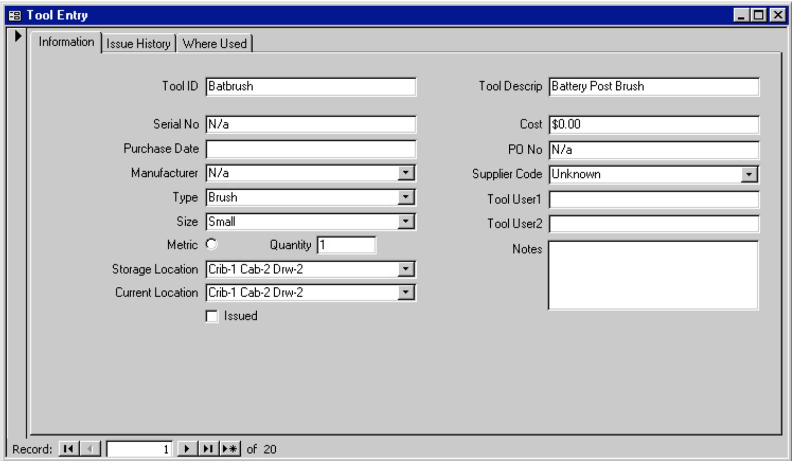
To print purchase orders that you've created or edited, click on the **Reports** icon on the left-hand side of the Main Menu, click **Part Reports,** then click **Purchase Order Listing** in the report listing that appears. The filter window for the report lets you select a particular purchase order or group of orders to print; the printed report shows one purchase order per page. The orders show the manufacturer's part number that you entered in **Part Entry;** if you didn't enter a manufacturer's part number, your purchase orders show your company part number.

Chapter 8:
Tool Records

To work with tool records, click on the **Tools** icon in FaciliWorks' Main Menu, then click on the **Tool Entry** button. In the **Tool Entry** window, you can create and edit records for all of your tools, including each tool's usage history.

Tool Entry

Tool Entry—Information



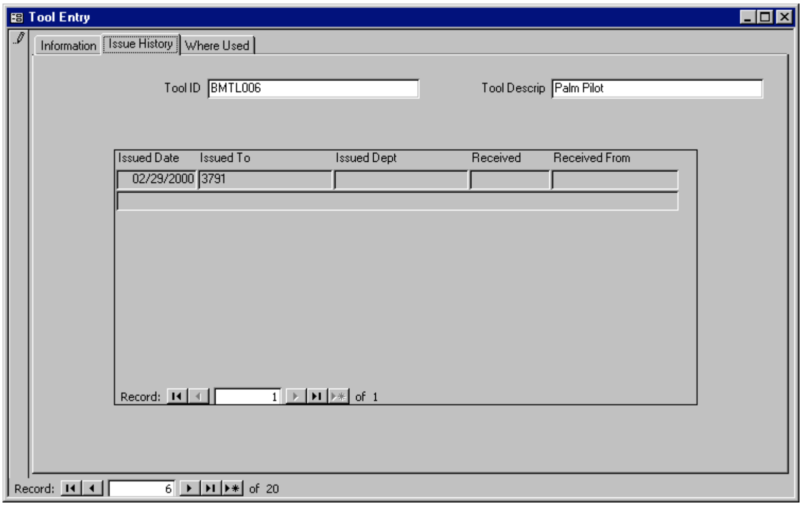
This table explains all of the fields in the **Tool Entry** screen:

Field Name	Description
Tool ID	Enter a unique alphanumeric code for each tool.
Serial No.	Enter the tool's serial number or model number.
Purchase Date	Enter the date the tool was purchased.
Manufacturer	Enter the name of the tool's manufacturer.
Type	Select or enter the type of tool. Because this field can be used to filter your tool records, it's a good idea to be consistent in your entries..
Size	Enter information about the tool's size or its range of use. Because this field can be used to filter your tool records, it's a good idea to be consistent in your entries..
Metric	Click inside this radio button to fill it in if the tool is metric.
Quantity	If this tool contains different pieces or is part of a set, enter the total number of pieces.
Storage Location	Enter the tool's storage location.
Current Location	When you first enter the tool record, enter its current location here. FaciliWorks automatically updates this field when you issue the tool.
Issued	As you enter **Tool Entry** records, FaciliWorks automatically updates this field to show whether the tool is issued out.
Tool Descrip.	Enter a description of the tool.
Cost	Enter the tool's original cost.
PO No.	Enter the purchase order number used to purchase the tool.

Field Name	Description
Supplier Code	Enter or select the code of the tool's supplier.
Tool User 1; Tool User 2	These two custom fields keep track of other specific information you need for each tool (see *Changing Field Labels in FaciliWorks* on page 273 of the *System Administrator's Guide* for information on changing these and other field labels).
Notes	Enter any additional information about the tool.

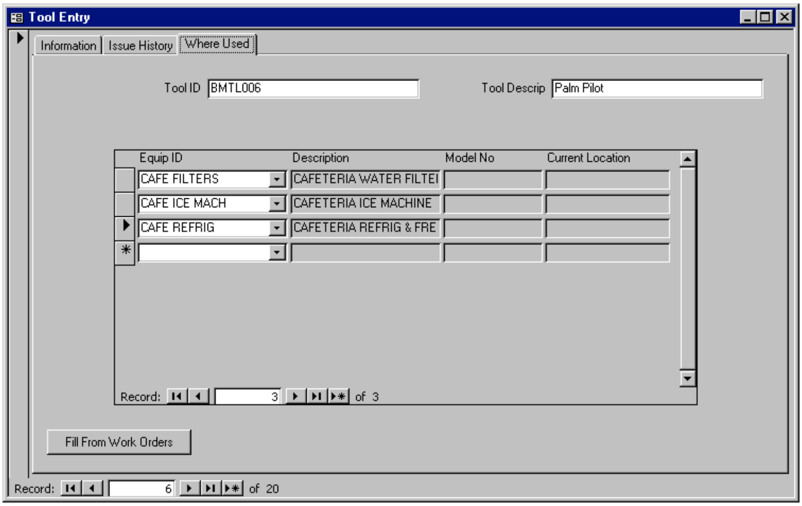
Tool Entry—Issue History

The **Tool Entry—Issue History** screen lists every occasion when a tool has been checked out, including return information. The most recent information is listed at the top. You can't edit this information here–go to **Edit Tool Issue Records** to change any tool issue information.



Tool Entry—Where Used

In this screen, you can list each piece of equipment that uses this tool. Select as many equipment IDs as needed, and the rest of the equipment information will automatically display in the appropriate fields. Click the **Fill from Work Orders** button to automatically insert the equipment IDs, based on completed work orders.

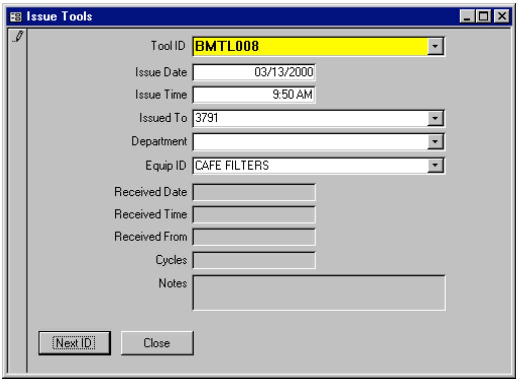


Issuing Tools

FaciliWorks' Tool Issue helps you track tool location and usage, including both reasons for use and number of times used. To issue or return tools, click on the **Tools** icon on the left-hand side of the Main Menu, then click on the **Issue Tools** or **Return Tools** button. The **Next ID** button in the **Issue Tools** and **Return Tools** windows helps you process a number of tools quickly by letting you go on to the next tool without having to close and reopen the window. To modify tool issue records, click on **Edit Tool Issue and Return Records.** To see all tool issue, usage, and return information, click on the **Reports** icon in the Main Menu; then click on **Tool Reports,** and finally click on **Tool Issue History.**

Issue Tools

When you select this option, this window appears, allowing you to issue tools.

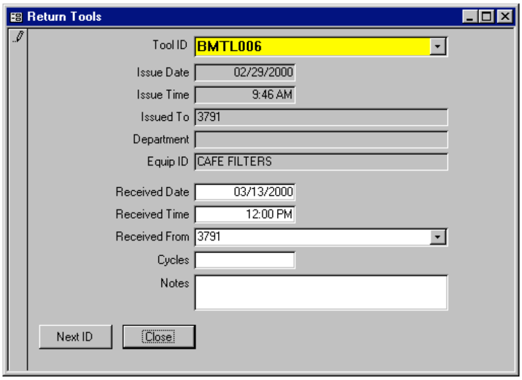


To issue a tool, you must create a new issue record. The fields in this screen are explained below.

Field Name	Description
Tool ID	Select the tool you want to issue from the drop-down list.
Issued Date	This field displays the current date. If you don’t want to use this date, double-click in this field to select a date from the pop-up calendar.
Issued Time	*Issued Time* displays the current time. If necessary, you can change the time shown in this field. If the time displayed is not accurate, reset the clock for your computer using **Windows Control Panel**.
Issued To	Select or enter the name of the person the tool is issued to..
Department	Select or enter the name of the department that will use the tool.
Equip. ID	If you’re checking out the tool for use on a particular piece of equipment, select its Equipment ID here.
Next ID	Click this button to issue several tools without closing the **Issue Tools** window.

Returning Tools

To return tools, go to the **Tools** menu and select **Return Tools**. This screen appears:



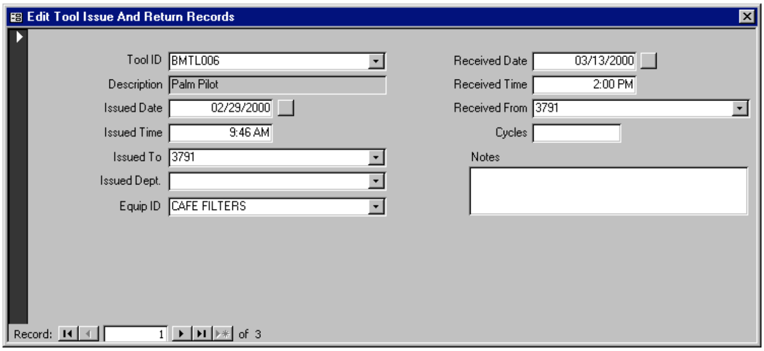
Select the ID of the tool you need to return from the Tool ID drop-down list. The tool's issue information automatically appears in the appropriate fields.

Note: You cannot return a tool if you don't have an issue record for it.

Field Name	Description
Received Date	This field displays the current date. If you don't want to use this date, double-click in this field to select a date from the pop-up calendar.
Received Time	This field shows the current time. As with the date fields, you can change the time shown in this field.
Received From	Enter the name of the person or department that returned the tool.
Cycles	Enter the number of times the borrower used the tool.
Notes	Enter any additional information about the tool or its use. You may want to indicate what the borrower used the tool for or what its current condition is.

Edit Tool Issue Records

If you select the **Edit Tool Issue and Return Records** option, this screen appears:



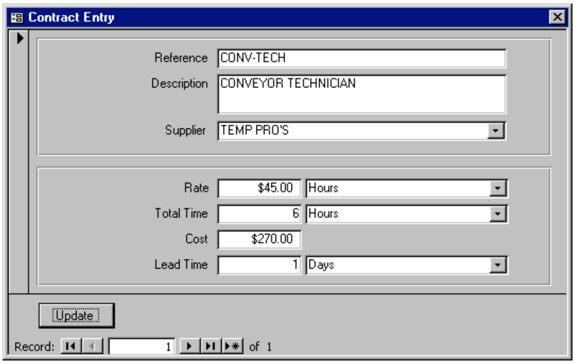
The fields in this screen are similar to the ones described above. This screen also shows the tool's description with its ID (if this information is entered in your tool entry records).

Chapter 9: Contract Records

To enter contract records, click on the **Main Records** icon on the left-hand side of the Main Menu, then click the **Contract Entry** button.

Contract Entry

In **Contract Entry**, you can enter information about outside services or consultants.



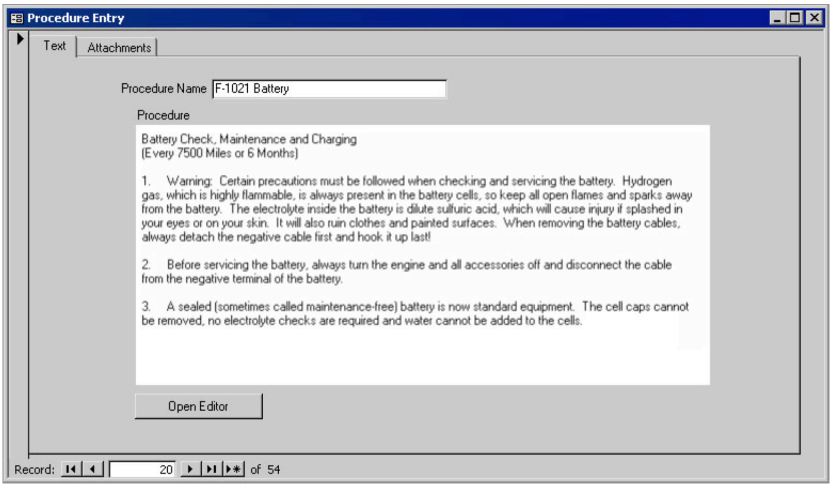
Field/Button Name	Description
Reference	Enter a unique reference ID for each contract.
Description	Enter a description of the services or equipment provided by the contract.
Supplier	Enter the name of the supplier of the contracted goods/services.
Rate	Enter the contract rate in these fields; for example, "$75/Day".

Field/Button Name	Description
Total Time	Enter how the length of time the goods or services will be needed.
Cost	FaciliWorks calculates the total cost of the contract by multiplying the rate times the Total Time field.
Lead Time	If the supplier needs a specific amount of notice for providing the contract, enter that notice time in this field.
Update	If you change the record, click this button. You can update associated equipment tasks, associated **Task Entry** tasks, or both types of tasks.

Chapter 10: Procedure Records

To create and edit procedure records, click on the **Main Records** button at the left-hand side of the Main Menu, then click on the **Procedure Entry** button. In **Procedure Entry,** you can create procedures to attach to your equipment, task, and work order records. You can also include pictures, maps, multi-media files, or any other document or file with your procedures.

Procedure Entry—Text



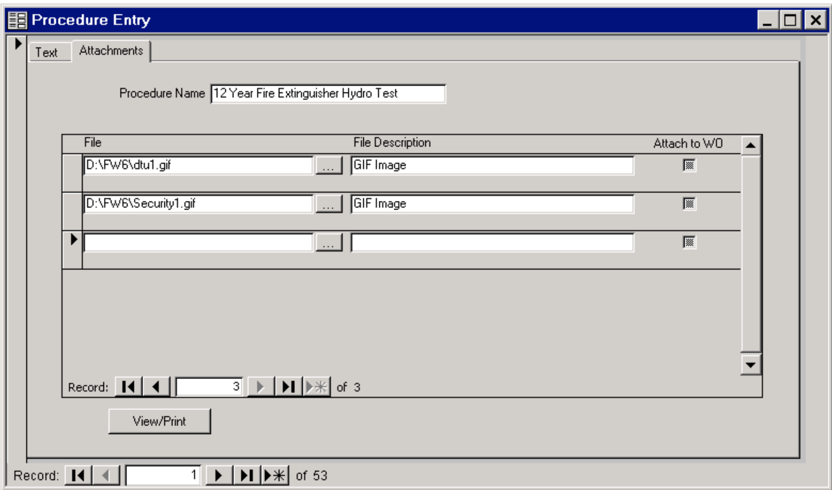
Use the record selector buttons at the lower left corner of the **Procedure Entry** screen to go to different procedures.

To enter a new procedure, click on the New Record button. Each procedure must have a unique **Procedure Name**. If you try to create two procedures with the same name, FaciliWorks will remind you that you cannot have duplicate index values. If this happens, then enter a unique name or click the **Undo** button.

Next, enter the procedure's text. You can either type directly in the **Procedure** field or paste text from an existing file. If you need more formatting options (including paragraph indent, bullet points, font formatting, or other choices) click the **Open Editor** button to open an external text editor program to edit your procedure information.

Tip: Changes made to a procedure affect all tasks and equipment that use it.

Procedure Entry—Attachments



You can attach pictures, maps, other drawing objects, or any other file to procedures in the **Attachments** screen. To attach a file to a procedure, type the file path and name into the **File** field or click the **...** button to browse for the file. There is no limit to the number of files you can attach. To view or print attached files, click on the **View/Print** button.

The following table describes each field and button in this screen:

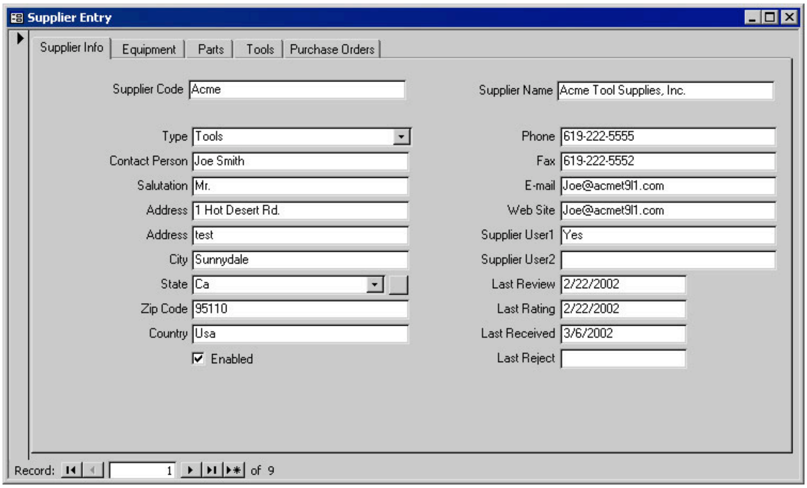
Field/Button Name	Description
File	To attach a file, enter its file path and name or click on the ... button to browse to the file.
File Description	FaciliWorks automatically enters the file type of the attached file. This field can be edited if necessary
Attach to WO	Mark this checkbox to allow your attachments to be printed along with your Work Orders.

View/Print	Click on this button to open the file for viewing or printing. FaciliWorks will open the file with the Windows default file type settings as registered. If no match is found, you will be prompted to select an appropriate program.

Chapter 11: Supplier Records

To enter your supplier records, click on the **Main Records** icon, then click on the **Supplier Entry** button. In **Supplier Entry**, you can enter detailed records of your suppliers and the products you purchase from them.

Supplier Entry—Information

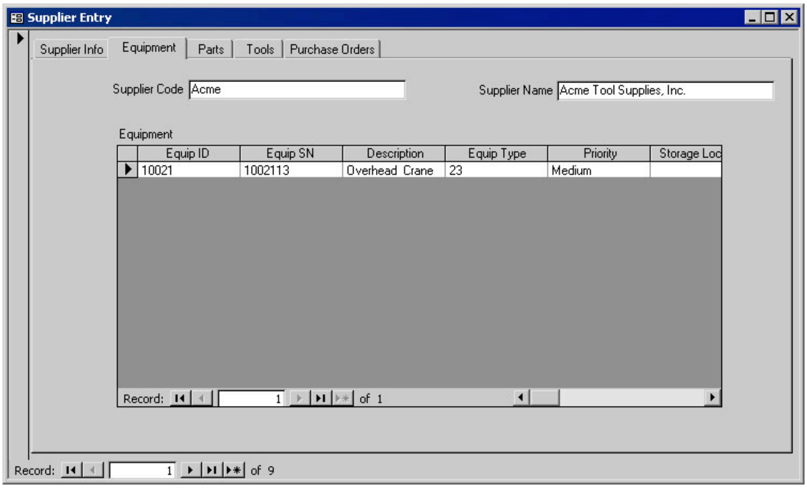


This table lists each of the fields in the **Supplier Entry—Information** screen:

Field Name	Description
Supplier Code	Enter a unique alphanumeric identification code for each supplier.
Supplier Name	Enter the supplier company name.
Type	Select the supplier type or enter a new type to add to the list.

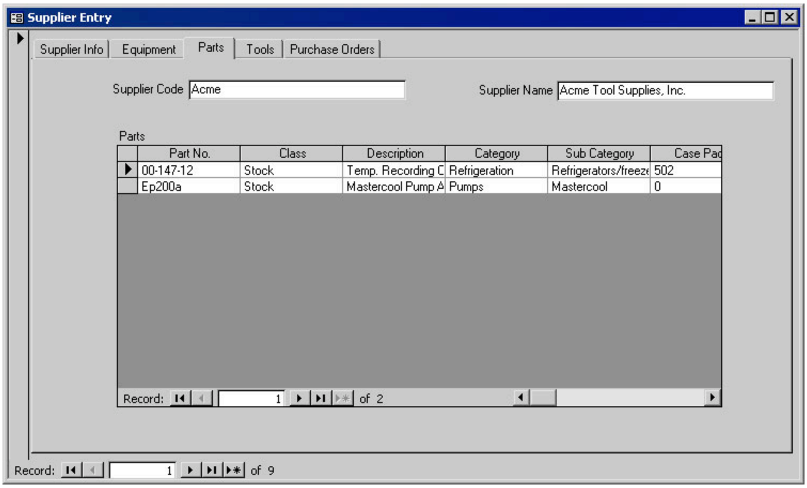
Field Name	Description
Contact Person	Enter the name of the person to contact at the supplier company.
Salutation	You can enter `Mr.`, `Ms.`, or `Mrs.`, according to how you want to address this supplier in your communications. If you leave this field blank, FaciliWorks will direct your correspondence simply to the name of the contact person (for example, *Joe Smith* instead of *Mr. Joe Smith*).
Address, City, State, Zip, **and** Country	Enter the supplier's address in the appropriate fields. **Note: To modify or add to the *States* drop-down list, click on the unmarked button to the right of the drop-down button; the** States Entry **form will appear.**
Phone **and** Fax	Enter the supplier's telephone and fax numbers.
E-Mail, Web Site	Enter the supplier's e-mail address or web site, if any, in these fields.
Enabled	Check this checkbox to indicate that this supplier is currently active. Only enabled suppliers appear on lists of available suppliers.
Supplier User 1 and Supplier User 2	Use these fields to store other information about each supplier. See *Changing Field Labels in FaciliWorks* on page 273 of the *System Administrator's Guide* for more information on changing these and other field labels.
Last Review	Enter the date of the last review for this supplier.
Last Rating	Enter the date of the last rating of this supplier.
Last Received	Enter the date of the last shipment you received from this supplier.
Last Reject	Enter the date of the last time you rejected parts from this supplier.

Supplier Entry—Equipment



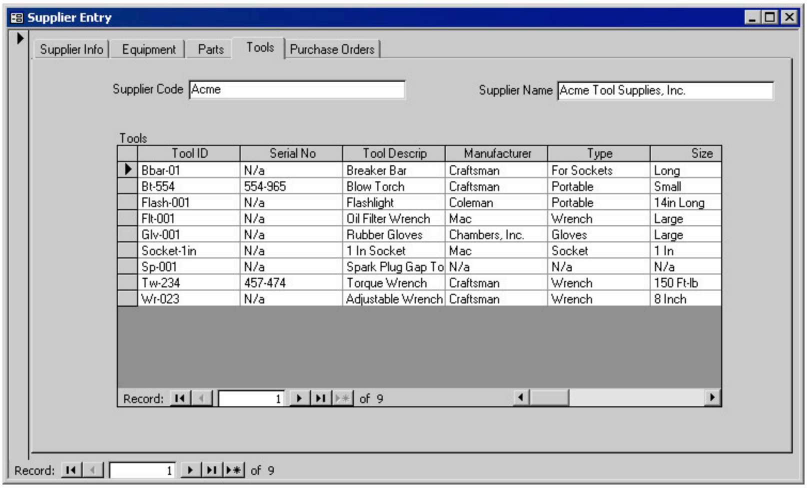
The **Supplier Entry—Equipment** screen automatically displays all of the equipment records that list this supplier. You cannot enter or edit any information here. If you need to edit this information, close the **Supplier Entry** screen to return to the Main Menu, then click on the **Main Records** icon on the left side of the Main Menu. Click on **Equipment Entry** and make the required changes. Return to **Supplier Entry—Equipment**. FaciliWorks will display the updated information.

Supplier Entry—Parts



Like the **Equipment** screen, the **Supplier Entry—Parts** screen automatically displays all part records that identify this supplier. If this information is incorrect or incomplete, go to **Part Entry** and change it, then FaciliWorks will show the change here.

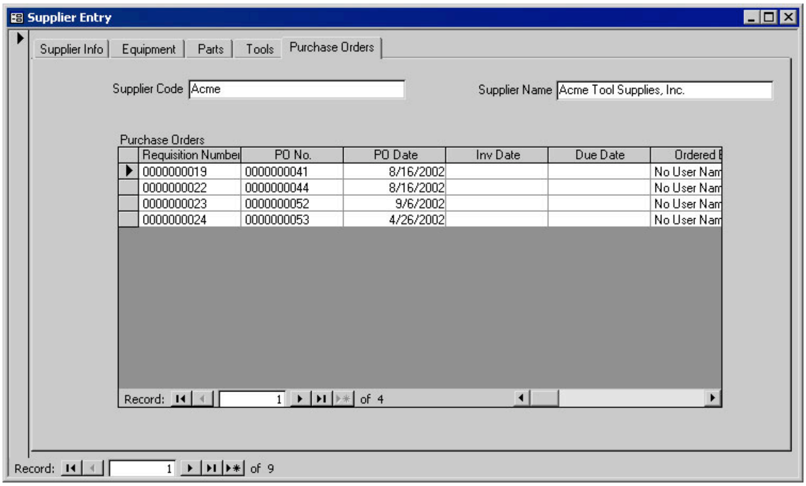
Supplier Entry—Tools



The **Supplier Entry—Tools** screen shows all tool records associated with this supplier. As in the **Equipment** and **Parts** screens, you can't change this information here, but you can change it in **Tool Entry**. FaciliWorks will then update this screen with your changes.

Supplier Entry-Purchase Order

Again, like the Equipment Screen, the **Supplier Entry-Purchase Order** screen automatically displays all purchase order addressed to the particular supplier. The fields are again non-editable. To modify records, go to the **Edit Purchase Order** screen from the **Inventory** menu.



Chapter 12: Variable Records

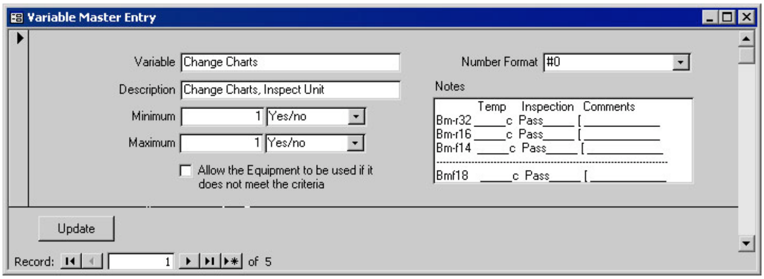
A variable is a condition that might affect the maintenance or safe operation of a piece of equipment. These conditions should be checked during maintenance. Measured variables, such as temperature or pressure, should fall above a minimum, below a maximum, or both. In FaciliWorks, you can enter information about variables and later assign them to tasks.

The table below lists some examples of equipment, along with possible variables for each type of equipment.

EQUIPMENT EXAMPLE	POSSIBLE VARIABLE(S)
Brake drum	Degrees of flatness
Motors	Oil temperature and oil pressure
Gears	Lash
Boilers/heaters/condensers	Fluid temperature
Pressure lines, reservoirs, and accumulators	PSI
Electrical equipment	Amps
Outdoor machinery	Ambient air temperature and humidity
Handling/restraining equipment	Torque - foot-pounds
Flexible tensioning devices	Elasticity/resilience
Tires	Depth of tread
Repetitive production tools	Dimensional wear
Gages and measuring devices	Calibration tolerances
Plastic molding equipment	Durometer
Shafts	MM out of round

To enter variables, select **Variable Entry** from the **Main Records** menu. The **Variable Entry** screen appears.

Variable Entry



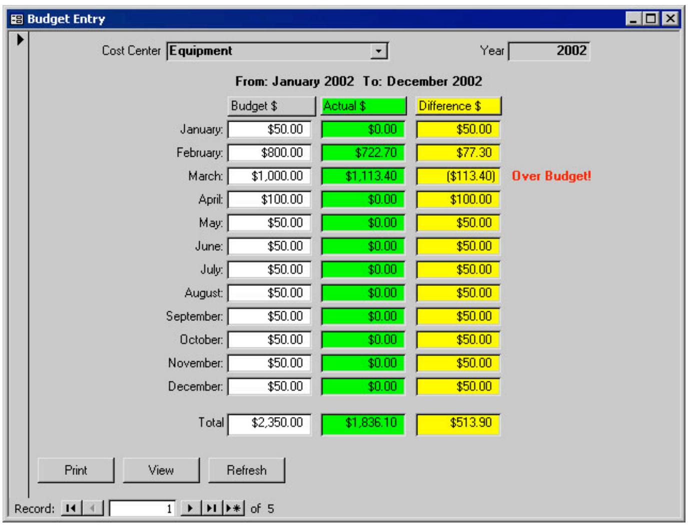
Each of the fields in this screen is explained below.

Field Name	Description
Variable	Enter a unique alphanumeric name or code for each variable.
Description	Enter a brief description of what the technician should test.
Minimum	Enter the minimum acceptable measurement for this variable; use the field on the left for the actual number, and select the measurement units from the drop-down list on the right.
Maximum	Enter the maximum acceptable measurement for this variable; use the field on the left for the actual number, and select the measurement units from the drop-down list on the right.
Allow the Equipment to be used if it does not meet the criteria	Check this checkbox if you can use the equipment even if it doesn't meet the specified requirements for this variable. Variable records that have this checkbox marked are the records FaciliWorks will find when you filter for *Allow Use If Fail* in variable report filters.
Number Format	Select the number of decimal places needed for the precision of the measurement.
Notes	Enter instructions for measuring or testing the variable, including how to check variables that you can't quantify.
Update	The **Update** button lets you update information for multiple records quickly and easily. For this reason, be careful when you use this powerful tool. You can choose to update the variable in task records, but not in equipment task records; update it in equipment task records, but not in task records; or update it in all task and equipment task records that use it.

Chapter 13: Budget Entry

Budget Entry

Use FaciliWorks' **Budget Entry** feature to compare estimated maintenance costs with actual costs. You must have rights to the **Budget** feature in order to use it (see the **Security** section on page 283 of the *System Administrator's Guide* for more information). To access this feature, select **Budget Entry** from the **Main Records** menu.



Set up a separate budget for each of your cost centers; then, to compare costs, select or enter the cost center and year for which you wish to see data. After you edit the estimated costs for a cost center, use the **Refresh** button to recalculate the difference between estimated and actual costs. Whenever the actual cost exceeds the estimated cost, the program will flag the month as *Over Budget!"*

Budget Entry with Components

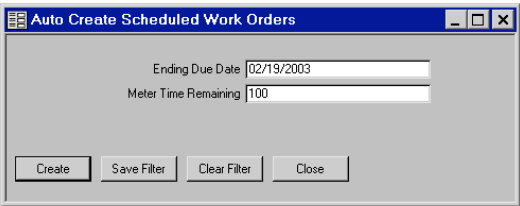
This is exactly like **Budget Entry** except that attached components are also included in the budget computation, even if the related components are not members of the current cost center.

Chapter 14: Work Orders

To create and edit Work Orders, go to the Main Menu; click on the **Work Orders** icon to bring up the **Work Orders** menu. This menu offers several options for work orders, including automatically or manually creating work orders for scheduled maintenance, creating work orders for unscheduled maintenance, and editing work orders. We'll talk about each of these options next.

Auto Create Scheduled Work Orders

Select this utility to instantly create work orders for equipment due for maintenance. A filter window appears; use it select the work orders you want to create.



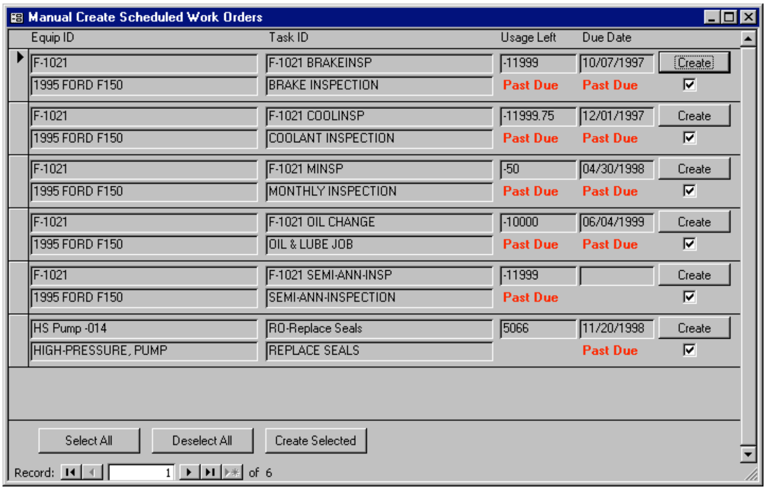
To create work orders for all maintenance tasks due by a certain date, enter that date in the **Ending Due Date** field. (FaciliWorks automatically enters a date in this field one month later than the current date.) To create work orders for tasks due by a particular meter reading, enter the amount of meter time remaining until those tasks are due. Click **Save Filter** if you will use this filter setup on a regular basis; you can then use it again when needed. Click **Clear**

Filter to remove the filter values; click **Close** to return to the Main Menu without creating the orders.

When you're ready to create the work orders, click the **Create** button. FaciliWorks creates the work orders, then asks if you want to print them immediately or view them first. FaciliWorks also tells you if you don't have any maintenance tasks that fit your filter criteria.

Manual Create Scheduled Work Orders

Use this method when you want to selectively create work orders. When you open this utility, the following screen appears:



This screen lets you see which items are due for maintenance, including whether each one is due by its meter reading, date schedule, or both. Place a check in the box of each work order you want to create, then click its **Create** button. You can select all of the work orders by clicking the **Select All** button on the bottom left side of the screen, then clicking the **Create Selected** button.

Important: The meter rollover feature does not affect Automatic **or** Manual Create Scheduled Work Orders **because these utilities operate on the difference between** Current Meter **and** Next Meter Due**. This value will be the same for both the left and right columns of these two fields. For example, if a piece of equipment's total** Current Meter **(left field) was 2260 when the total** Next Meter Due **value (left field) was 2300, the difference is 40 hours. When the actual** Current Meter **value (right field) was 10, the current** Next Meter Due **(right field) was 50. The difference between these two fields is also 40. Since this difference will always be the same *value*, the meter rollover feature does not affect either of these functions. (For more information on the meter rollover feature, see pages 80 and 158)**

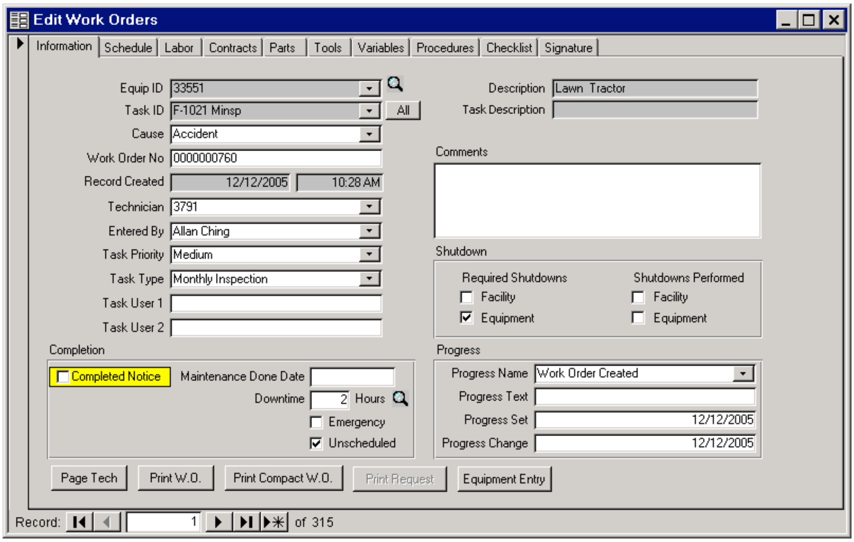
Create Unscheduled Work Orders

To create work orders for emergency or other unscheduled maintenance tasks, select this utility. The screens for this function are similar to the **Edit Work Orders** screens; you can follow the instructions given next.

Edit Work Orders

Once you create work orders, select this utility to enter completion information or edit them. The **Edit Work Orders – Information** screen appears.

Edit Work Orders—Information

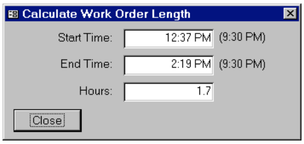


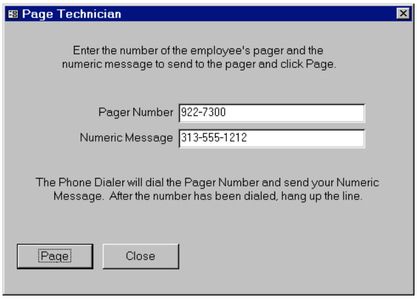
Note: The Work Order No is a unique identifier generated automatically by the application, depending on the number format you specified in Settings – Automatic Numbering (for more information, please see Settings – Automatic numbering on page 270). This is a required field.

Some of the fields in this screen will automatically display the information you entered in **Equipment Entry** and **Task Entry.** You can change some of this information, if necessary.

This table describes the fields and buttons in the **Information** screen:

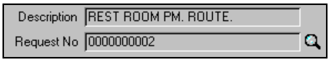
Field/Button Name	Description
Equip. ID and Description	FaciliWorks automatically displays the Equipment ID and Description in these fields.
Request No.	If a service request was created for this piece of equipment, FaciliWorks automatically enters the service request number in this field. **Note:** If no service request was created, this field will not appear
Task ID	FaciliWorks allows you to create a work order with any task. This means that you can go to **Task Entry** and create tasks to perform emergency or unscheduled maintenance, and then create work orders for those tasks. When you open the **Information** screen, the **Task ID** pull-down list will show only tasks linked to the selected equipment. To see all tasks, click the **All** button next to the **Task ID** field. When you click this button, the list will show all of the tasks in your database. To change the list to show only tasks linked to the equipment, click **All** again. If you created the work order from **Auto** or **Manual Create Scheduled Work Orders**, the task ID automatically appears; you can't change it.

Field/Button Name	**Description**
Task Description	Enter a description of the task (maximum of 50 characters). Note that this field can only be edited in the Equipment Entry and Task Entry modules. Otherwise, this field is read-only.
Cause	In this field, select the reason for the work order (your system administrator creates this list during program setup—see *Work Order Cause Entry* on page 275 in the *System Administrator’s Guide* for more information).
Work Order No.	FaciliWorks automatically assigns a number to this work order, based on the format your system administrator created in the **Settings—Automatic Numbering** screen; see the *System Administrator’s Guide* for information.
Record Created	When you create a new work order record, FaciliWorks automatically inserts the current date and time into these fields. You can’t change them.
Technician	In this field, you’ll see the ID code for the technician assigned to this task. If necessary, you can select a different technician.
Entered By	Select your name as the creator of this work order.
Task Priority	This field describes the importance assigned to the task.
Task Type	FaciliWorks automatically fills in the information in this field from your **Task** (or **Equipment) Entry** records. You can change the task type, if necessary.
Task 1 and Task 2	These fields contain the user-defined information that you track for each task. FaciliWorks pulls this information from **Task** (or **Equipment) Entry**, but you can change it here to suit this particular work order.
Comments	Any information that you enter in this field will also appear in the **Work Order History** report, **Work Order Cost** reports, and on the printed work order. Press SHIFT-F2 in this field to open a larger text window.
Required Shutdowns **and** Shutdowns Performed	If you must shut down the equipment and/or the facility to perform the maintenance task, a checkmark will appear in the appropriate checkbox(es). Place a check in the corresponding **Shutdowns Performed** box when you complete the shutdown.
Completed Notice	When you’re finished with the task, put a check in this box. Checking **Completed Notice** closes the work order, deducts parts used, charges cost centers, and completes the information regarding the open work order.
Maintenance Done Date	Enter here the date the completion date of maintenance work.
Downtime	In this field, either enter the actual number of hours or double-click to use the downtime calculator, shown below. Enter times in the format shown. 
Emergency	If this work order is for emergency maintenance, check this box.
Unscheduled	If this work order is not part of the equipment’s routine maintenance, check this box.

Field/Button Name	Description
Progress Name	This field shows the status of the work order. By default, FaciliWorks automatically updates the status of work orders when they are created or completed. If you wish, you can change the status of the work order by choosing from the drop-down list. For information on editing progress names or creating new ones, see *Work Order/Service Request Status*, on page 278 of the *System Administrator's Guide.*
Progress Text	Enter comments on the status of the work order, e.g., "Part Number X-0011 on backorder."
Progress Set	FaciliWorks automatically enters the date of the last change in the progress of this work order. You can edit this date if you wish.
Progress Change	Enter the date you expect the progress of this work order to change next; e.g., if you are waiting for a part, enter the date you expect to receive the part.
Page Tech.	Click this button to call the assigned technician's pager to leave a message. This screen appears:  To page the employee, click **Page**. FaciliWorks sends the numeric message to the employee's pager. You must enter the pager number in **Staff Entry** before you can page the employee from this screen. **Note: The first time you use this feature, FaciliWorks asks you to select the appropriate COM port–see *Work Order Entry: Set Up COM Port* on page 362 of the *System Administrator's Guide* for instructions.**
Print W.O.	To view or print the work order, click this button. The printed work order will include all of the information applying to the task.
Print Request	Opens the page preview of the prepared service request form for printing
Equipment Entry	Opens the **Equipment Entry** screen

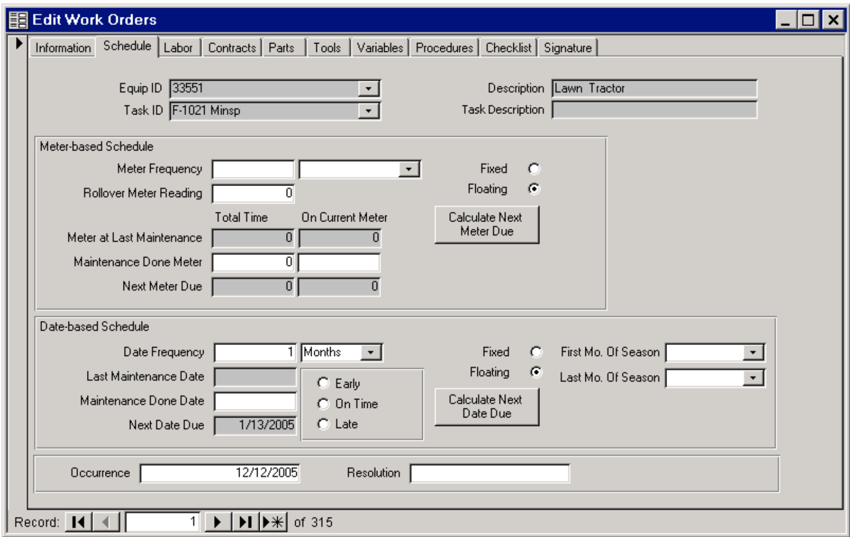
Work Orders from Service Requests

When you create a work order from a service request (see page 177), FaciliWorks shows the service request number under the equipment **Description** field, as shown here:



To see the original service request record, just double-click in this field. When you complete the work order, FaciliWorks marks the service request as closed and uses the work order's **Maint. Done** and **Downtime** fields as the completion date and time for the service request record. It also checks to see if the service request required a notification letter; if it did, FaciliWorks will ask you to preview the letter. When you do, the program inserts the current date as the letter sent date in the **Service Request Entry** record.

Edit Work Orders—Schedule



In the **Schedule** screen, you can view the maintenance scheduling information for this task. Until you complete the work order, you can change any of these fields except the **Last Maint. Date/Meter** and **Frequency** fields. Once you complete the work order, you can't change any of the scheduling information. This information becomes part of the maintenance history for the equipment.

For preventive maintenance tasks, you can mark if the maintenance was performed **Early**, **On-Time**, or **Late**.

Occurrence and **Resolution** are both date/time fields. These are used for the calculation of MTBF (Mean Time Between Failures) and MTTR (Mean Time to Repair). **Occurrence** is the time

a problem occurred with the equipment that required unscheduled work to be performed. **Resolution** is the time the problem was fixed.

Meter Rollover

The meter rollover feature works in the same way as for **Equipment Entry – Tasks**; see page 80 for instructions. Once you complete a work order, the meter and date fields in **Work Order Entry** will be locked; you won't be able to change them.

Fixed Schedule and Floating Schedule

The type of maintenance schedule (Fixed or Floating) will be indicated in the date and meter schedule sections of the **Work Order Entry—Information** screen. You cannot change the schedule type in this screen, but you can change it in either **Equipment Entry—Task List** or in **Task Entry** (see page 76 for more information).

How does a Floating schedule type affect my work order?
When you create a work order, the **Next Due Date/Meter** field will show the *current* due date/meter (i.e., the date/meter reading when you last performed this maintenance). You cannot change this date/meter in this screen.

When you complete this work order, FaciliWorks will update the **Next Due Date/Meter** field, based on the date/meter when you completed the work order (refer to the **Maintenance Done** field). If the **Maintenance Done Date** field is blank, FaciliWorks will automatically fill in today's date. If the **Maintenance Done Meter** field is blank, you can complete the work order, but FaciliWorks won't calculate the **Next Due Meter** field. To calculate the **Next Due Meter**, click **Cancel** to pause the completion, then enter the **Maintenance Done** information. When you complete the work order this time, FaciliWorks will calculate the **Next Due** fields.

How does a Fixed schedule type affect my work order?
When you create a work order, the **Next Due Date/Meter** field will show the *current due date/meter* (i.e., the date/meter reading that was assigned when the maintenance was last performed). You cannot change this date/meter in this screen.

When you complete this work order, FaciliWorks will update the **Next Due Date/Meter** fields, based on the previous **Next Due Date/Meter** information, *not* on the **Maintenance Done** information, as in a Floating schedule. However, you must still enter the **Maintenance Done** information before FaciliWorks will calculate the **Next Due Date/Meter.** If you're using a Fixed schedule, you cannot use the **Calculate Next Due Date/Meter** buttons to calculate the **Next Due Date/Meter.** Instead, FaciliWorks automatically calculates this information when you mark the task as completed.

FaciliWorks will calculate the **Next Due Date/Meter** only once per work order. This is because FaciliWorks bases the new **Next Due** values on the original **Next Due** values that appeared when you created the work order. If you could re-calculate the **Next Due Date/Meter**, FaciliWorks would still read from the most recent **Next Due** values. For example, let's say you complete a task with a one-month frequency that was due January 1. The **Next Due Date** would go to February 1. Now you un-check the **Completed** checkbox and mark the work order as incomplete. Later, you re-check the **Completed** checkbox. If FaciliWorks could re-calculate the

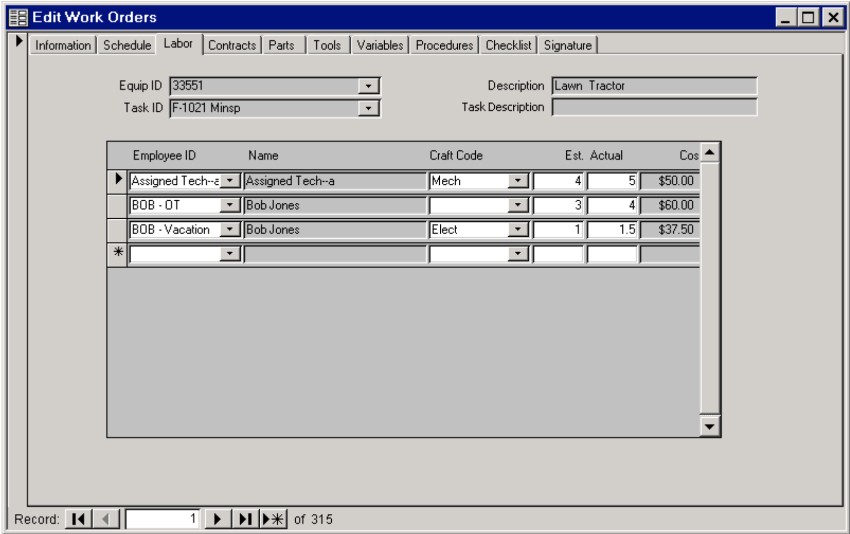
Next Due Date, it would base it on the most recent **Next Due Date,** now February 1, and update it to March 1. To prevent this type of error, FaciliWorks calculates each work order's **Next Due Date/Meter** only once.

> **Special Note to PDA Users:**
> **With the optional Personal Digital Assistant, the *Fixed* and *Floating* options operate in the same way as for work orders, with one exception: If a PDA user performs a task with a *Floating* schedule, he can't choose between canceling or completing the work order if the *Maintenance Done* information is blank. For meter-based schedules, if the *Maintenance Done* information is blank, and the user completes the work order in the PDA, FaciliWorks completes the work order without calculating the *Next Meter Due* information. For a date-based schedule, FaciliWorks uses the date on which you import the records as the *Maint. Done Date,* then uses this date to calculate the *Next Due Date.***
>
> **For more information, please refer to the *FaciliWorks PDA Software User's Guide.***

First Mo. of Season and Last Mo. of Season

These fields are used to create a season for equipment tasks. A season is the portion of the year a task needs to be done in. For example, in the spring and summer the lawn should be mowed once a week. But the lawn is dormant during the fall and winter, so it doesn't need to be mowed. Therefore, the season of the *Mow Lawn* task is the spring and summer. We set **First Mo. of Season** to March and **Last Mo. of Season** to September. When the *Mow Lawn* work order is completed, the next date due will be calculated. If this date falls during the months from March through September, then the due date is not changed. If this date falls in the months from October through February, then the date will be moved by month until the **First Mo. of Season.** Therefore, if the *Mow Lawn* work order is completed on September 27th, the next date due should fall on October 4th. Since this date is outside the season, FaciliWorks calculates the next date due as March 4th of the next year.

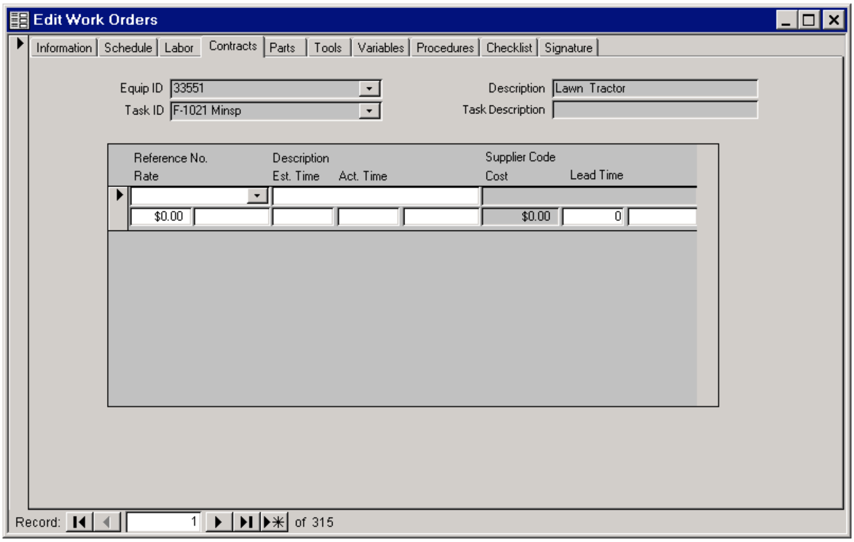
Edit Work Orders—Labor



In the **Labor** screen, you can edit the labor information for the current task. The fields appearing in this screen are explained below:

Field Name	Description
Equip. ID; Description; Task ID	FaciliWorks automatically displays the Equipment ID, Description, and Task ID in these fields.
Employee ID	Select the ID of the employee you wish to assign this work order from the drop-down list.
Name	FaciliWorks fills in the employee's name from the information entered in **Staff Entry—Information.** You cannot edit this field.
Craft Code	FaciliWorks fills in the craft code of this employee—indicating union affiliation, department, or classification—from the information in **Staff Entry—Information.** You can select a different craft code from the drop-down list if desired.
Estim.	Estimate how many hours for which you'll need the employee for this task.
Actual	Enter the actual number of hours the employee worked on this task.
Cost	FaciliWorks automatically calculates the cost of this work order, based on the number of hours entered in the *Actual* field above multiplied by the employee's rate. You can't edit this field.

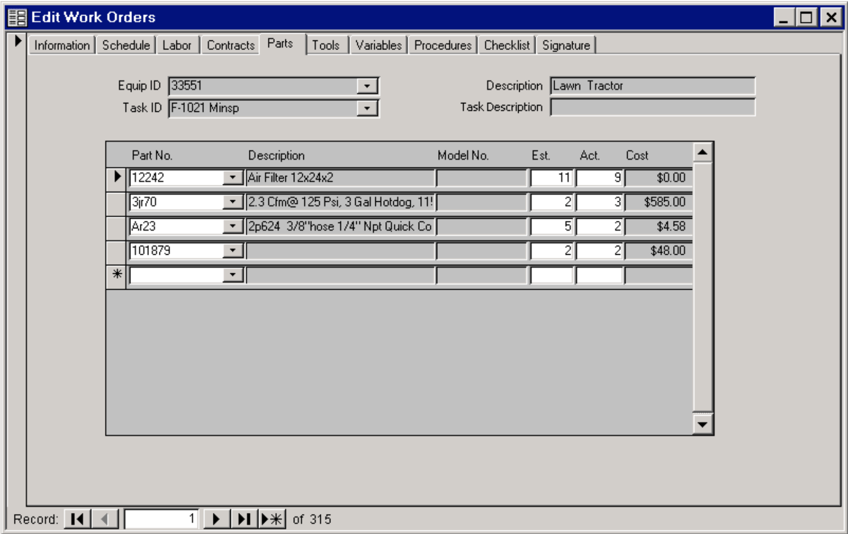
Edit Work Orders—Contract



You can also view and modify your **Contracts** information for this work order.

Field/Button Name	Description
Equip. ID; Description; Task ID	FaciliWorks automatically displays the *Equipment ID*, *Description*, and *Task ID* in these fields.
Reference No.	Select the reference number of the desired contractor.
Rate	FaciliWorks fills in the rate for this contract, based on information in **Contracts—Entry**. This field can be edited, if desired.
Description	FaciliWorks fills in description of this contractor, based on information in **Contracts—Entry**.
Est. Time	Enter the estimated amount of time this work order will take to complete in the left-hand field and the unit of time in the right-hand field.
Act. Time	Enter the actual amount of time this work order took to complete in the left-hand field and the unit of time in the right-hand field.
Supplier Code	FaciliWorks enters the Supplier Code for this contract as entered in **Contracts—Entry.**
Cost	FaciliWorks automatically calculates and displays the estimated cost, based on the time required multiplied by the rate.
Lead Time	FaciliWorks displays the lead time for the equipment or service as entered in **Contracts—Entry.** This field can be edited, if desired.

Edit Work Orders—Parts

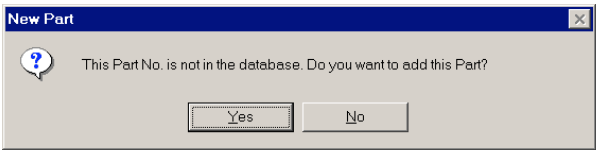


In the **Parts** screen, you can edit the information for the parts already selected for the current task and add new parts. Like the other selection screens, you can edit the white fields. FaciliWorks updates the gray fields accordingly.

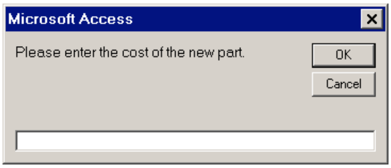
Each of the fields in this screen is explained below.

Field Name	**Description**
Equip. ID; Description; Task ID	FaciliWorks automatically displays the *Equipment ID, Description*, and *Task ID* in these fields.
Part No.	Select the ID code for each part needed for this task.
Description	This field shows the description of the selected part.
Model No.	The model number of the part appears in this field.
Est.	Enter the estimated number of parts required for the task.
Act.	Enter the number of parts actually used for the task
Cost	FaciliWorks automatically calculates and display the total cost, based upon the actual number of parts required and the unit cost of the part.

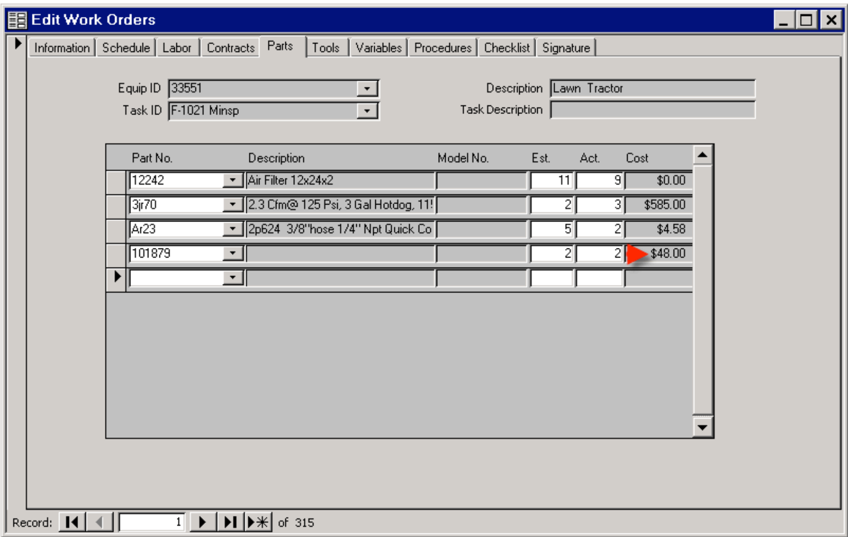
If, however, you enter an Part No not found in the database, this message will appear:



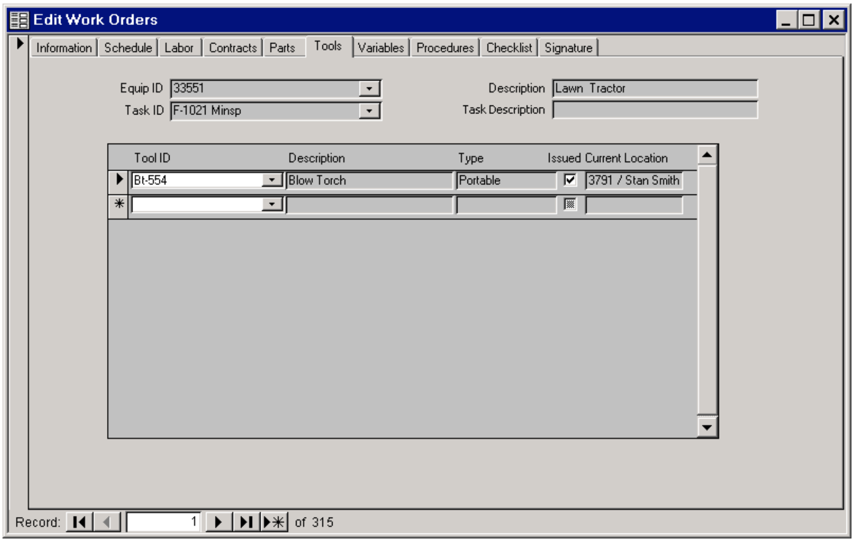
If you click **Yes**, the Part No you typed in will be entered automatically into the Parts database as it opens the Part Entry window requiring you to enter the part's specific information. If you choose not to add the new Part No to your database, this dialogue box will appear:



When you enter the cost of the part, let's say $24, and you specify the actual number of parts used, -- 2 units, for example --the application will automatically compute the total cost of the part used.



Edit Work Orders—Tools

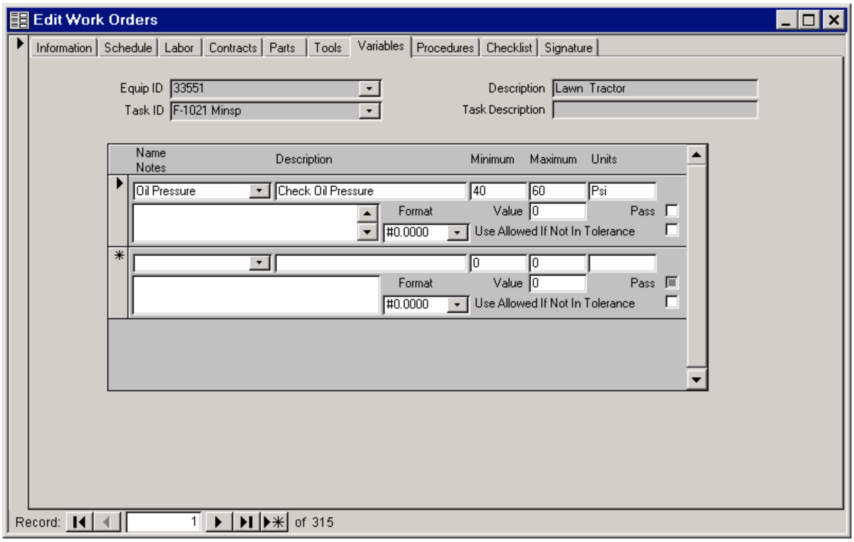


Use this window to assign tools to work orders. When you select a tool ID, FaciliWorks will automatically update the gray fields with each tool's information (again, you can edit only the white fields).

Each of the fields in this screen is explained below.

Field Name	Description
Equip. ID; Description; Task ID	FaciliWorks automatically displays the *Equipment ID, Description*, and *Task ID* in these fields.
Tool ID	Select the ID for each tool you need for this equipment task.
Description	This field shows a brief description of the tool that you select.
Type	The type of tool is shown in this field.
Issued	If this box is checked, the tool has been issued. You cannot edit this field.
Current Location	The tool's current location appears in this field. If the *Issued* box is not checked, the tool's current location as entered in Tool Entry is shown; if the *Issued* box is checked, the Employee ID of the employee the part has been issued to is shown.

Edit Work Orders—Variables



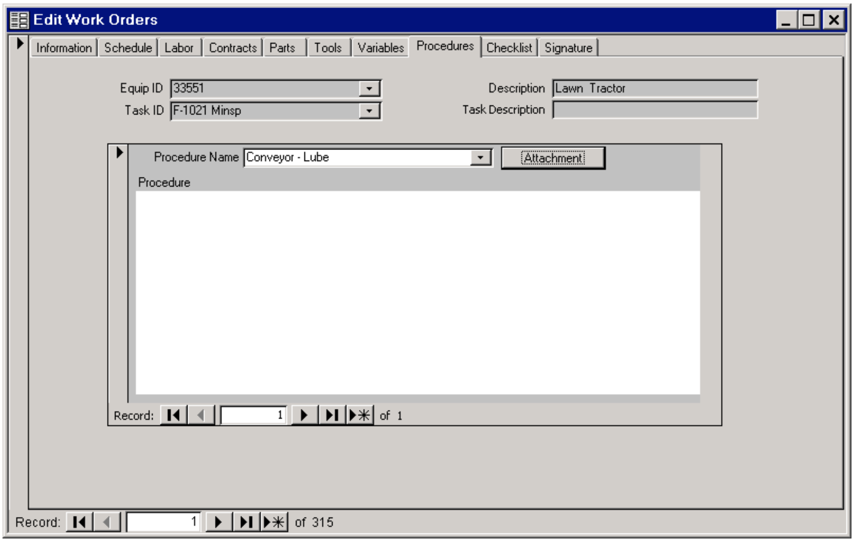
The **Variables** screen displays the variable information that you entered in **Task Entry—Variables.** In this screen, you can edit the variable information to apply specifically to this work order.

Each of the fields in this screen is explained below.

Field Name	Description
Equip. ID; Description; Task ID	FaciliWorks automatically displays the *Equipment ID, Description*, and *Task ID* in these fields.
Name	Enter or select the name of the variable that the technician should check.
Notes	Enter any other pertinent information, such as instructions for testing the variable.
Description	Enter a description of the variable.
Minimum	Enter the minimum test parameter for the variable. For example, if the variable is temperature, enter the lowest acceptable temperature for the task.
Maximum	Enter the maximum test parameter for the variable.
Units	Enter the unit of measure, such as *degrees*, *inches*, *foot-pounds*, *rpm*, *mAmps*, *quarts*, *psi*, or any other way of measuring the job conditions.
Use if Fail?	Check this box if the equipment can be used and the task completed if the conditions specified for the variable are not met.
Format	Select a number format for the minimum and maximum values.

Edit Work Orders—Procedures

In the **Procedures** screen, you can assign a procedure to the work order. However, you can't edit procedures in this screen. If you need to modify a procedure, go to **Procedure Entry** from the **Main Records** menu. If the procedure has a file attached, click the **Attachment** button to open or view it.

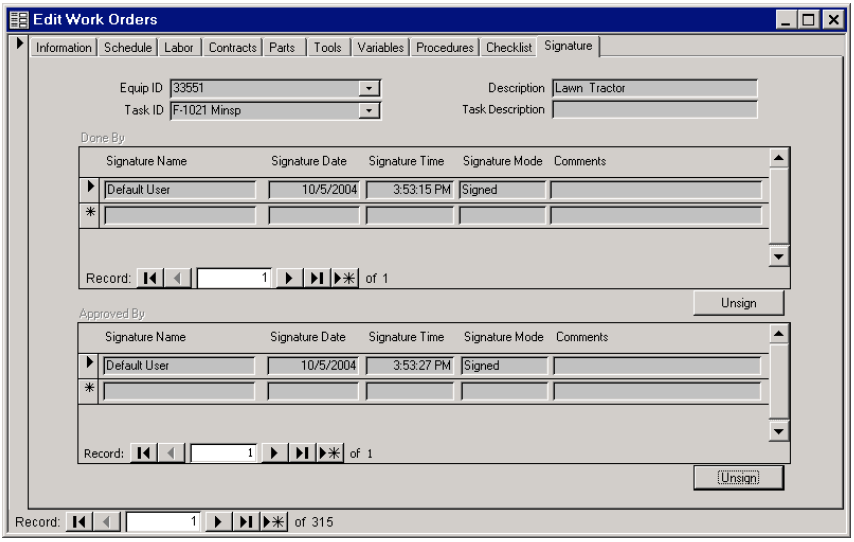


Edit Work Orders-Signature

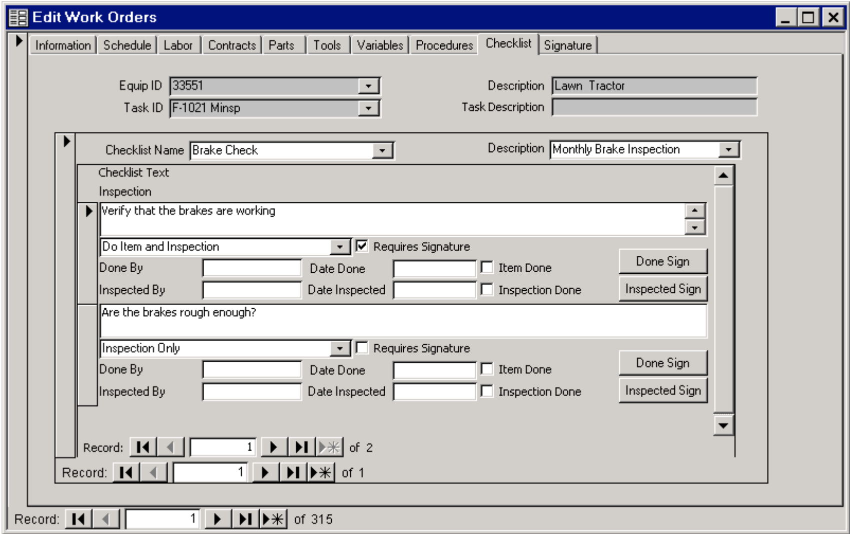
To use the signature feature, you must first activate security by checking the checkbox labeled **Enable Security** under **Settings—Options**. (For more information, see *Settings—Options* on page 265 of the *System Administrator's Guide*.)

When you want to sign a record as completed, click the **Sign** button. This creates a new signature record containing the user's name, the date, and the exact time. (The label on the **Sign** button changes to **Unsign** at this time, as well.) Once it has been signed, then the **Approved By** box can be signed. Once a record has been signed, it cannot be edited by anyone. A signed record can only be made editable if the original signer unsigns it; if the record's approval has been signed, the approval must be unsigned by the person who signed it before the record can be unsigned.

Note: **You can require users to enter their login name and password whenever they click the *Sign/Unsign* button by checking the checkbox labeled *Electronic Signature Login* under** Settings—Options. **(For more information, see *Settings—Options* on page 265 of the System Administrator's Guide.) If this option is not enabled, FaciliWorks will sign the record with the User Name of the user who is currently logged in.**



Edit Work Orders-Checklist



FaciliWorks obtains data for this screen from the task checklist assigned to equipment (for information on linking tasks and checklists, see **Equipment Entry–Task List—Checklist** on page 90). The fields in this screen are not editable. When each item in the checklist has been completed, click on **Done Sign**; upon inspection, click on **Inspected Sign**. Only after each item in the checklist has been completed and marked as done will you be able to check off the yellow **Completed Notice** checkbox in the **Information** tab of **Edit Work Orders.**

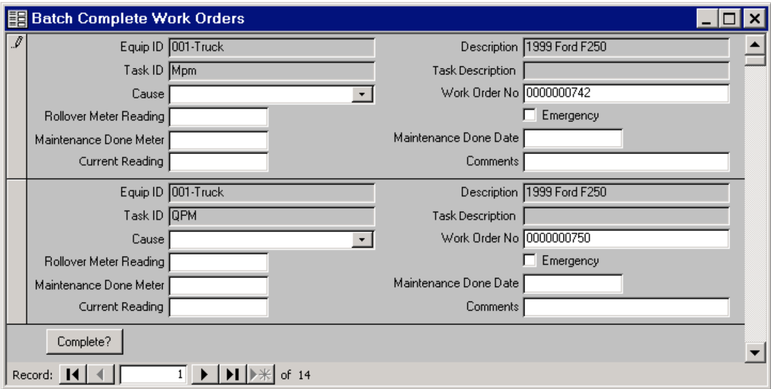
Each of the fields in this screen is explained below.

Field Name	Description
Equip. ID; Description; Task ID	FaciliWorks automatically displays the *Equipment ID, Description*, and *Task ID* in these fields.
Checklist Name	This field shows the name of the current checklist.
Description	This field shows the description of the current checklist.
Checklist Text	This field shows the text of the checklist item.
Inspection	This field shows whether the checklist item is to be done only, inspected only, or both.
Requires Signature	This box shows whether a checklist item requires an electronic signature.
Done By	This field shows the user name of the employee who has electronically signed that a checklist item has been done.
Date Done	This field shows the date a checklist item was done and signed.

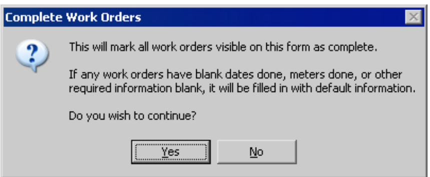
Field Name	Description
Inspected By	This field shows the user name of the employee who has electronically signed that a checklist item has been inspected.
Date Inspected	This field shows the date a checklist item was inspected and signed.
Done Sign	Click on this button to electronically sign a checklist item after it is done.
Inspected Sign	Click on this button to electronically sign a checklist item after it is inspected.

Batch Complete Work Orders

If you want to mark all work orders as completed, use this screen and click on the **Complete** button. This form lets you view all uncompleted work orders so you can enter appropriate meter readings and dates before marking them as complete.



A message will pop up after you click on the **Complete** button to confirm that you really want to continue with marking all records as completed.



Export Work Orders to PDA

To use this feature, you must have a handheld computer equipped with the optional FaciliWorks PDA software. For more information on using FaciliWorks PDA Software, please refer to the *FaciliWorks PDA Software User's Manual.*

Import Work Orders from PDA

To use this feature, you must have a handheld computer equipped with the optional FaciliWorks PDA software. For more information on using FaciliWorks PDA Software, please refer to the *FaciliWorks PDA Software User's Manual.*

Wireless Support

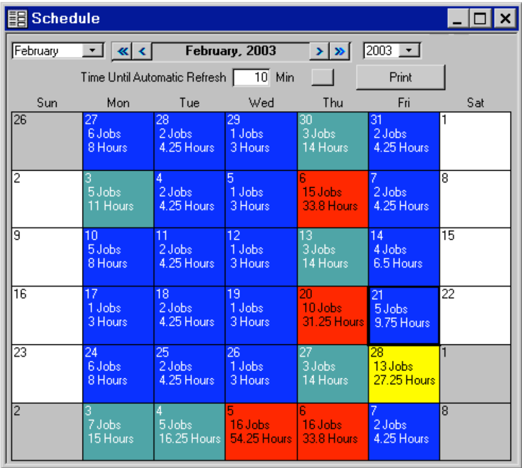
This feature allows users to transfer data to and from the PDA from any location. For example, a user in the office is running FaciliWorks 7 and selects several records which will be sent to another user out in the field. This other user can easily log on to the wireless PDA from any location where wireless service is available, thus allowing him to complete the records and send these back to the main database. The wireless support makes it easy for both users to combine wireless and standard HotSyncing in a compatible system.

Viewing Your Work Order Schedule

Calendar

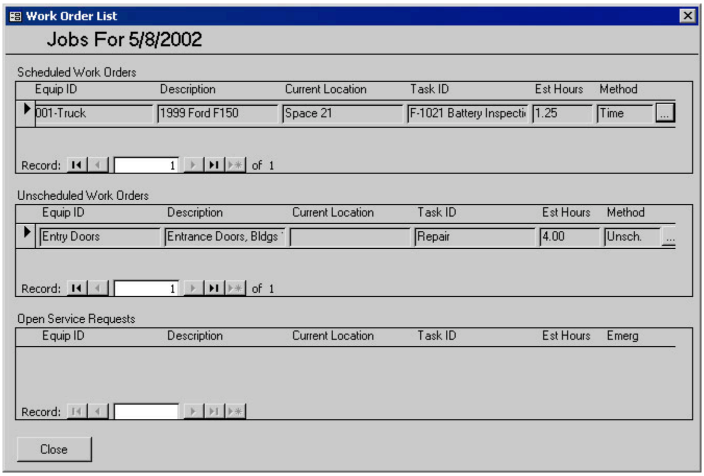
Select **Calendar** from the **Work Orders** menu to see a summary of your maintenance schedule, including the number of jobs and hours for each day of the month.

You can use this feature in several different ways. If you're using FaciliWorks on a network, with all users sharing the same data file, you might use one workstation to constantly display the calendar for your maintenance personnel. FaciliWorks automatically updates the display according to your program setup (for more information, see **Settings—Calendar** on page 267 of the *System Administrator's Guide*). On your individual workstation, you can open the calendar at any time to view past, present, and future maintenance activity. Because FaciliWorks automatically calculates the due dates for all equipment tasks for the next year, you can see your entire projected workload for the next 12 months.



The calendar contains a hidden maintenance work list for every day. To view the work list for any day, double-click on the calendar date; the maintenance work list for that day will appear (see below).

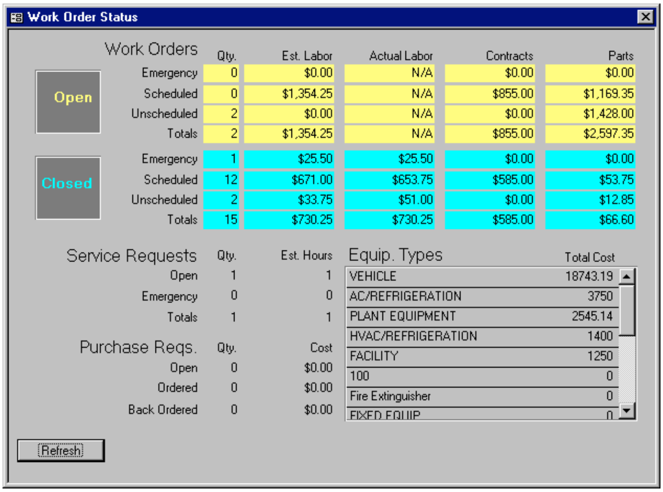
Work Order List (Daily)



FaciliWorks automatically updates the **Work Order List** according to the most recent information entered into your database. To view a work order in this list, click on the **...** button at the right.

Work Order Status

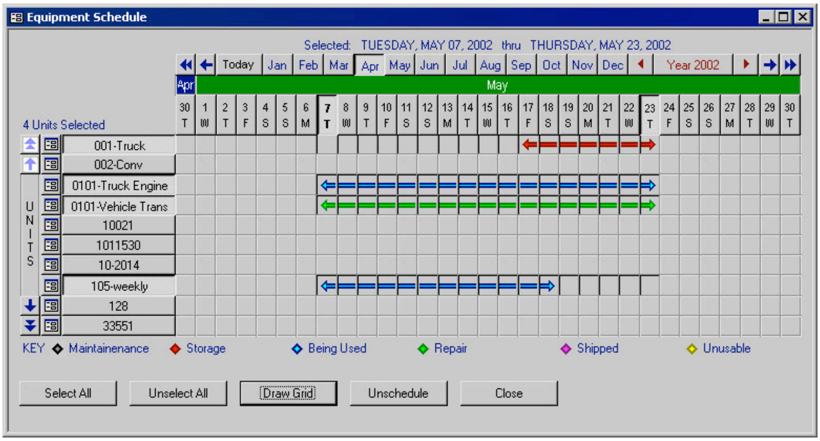
To see an up-to-the-minute, categorized summary of your open and closed work orders, as well as service requests and purchase orders, select **Work Order Status** from the **Work Orders** menu. The **Work Order Status** window will appear. In this window, you can also track total maintenance costs by equipment type.



FaciliWorks refreshes the **Current Status** display according to the **Service Request, Scheduling Calendar Refresh Interval** setting in FaciliWorks' **Settings** (see **Settings—General** on page 264 of the *System Administrator's Guide* for more information). Click the **Refresh** button to instantly update this screen.

Equipment Schedule

To view and schedule equipment use, select **Equipment Schedule** from the **Main Records** menu.



In this screen, you can create a customized schedule of equipment maintenance, usage, and availability, marking equipment as scheduled for usage, storage, shipping, or repair.

The equipment ID for each piece of equipment in your FaciliWorks database is displayed as a button on the left-hand side of this screen. Click on the button of each equipment ID you wish to schedule; you can select several pieces of equipment at a time, if desired. To deselect an equipment ID, click on its button again. Use the scrolling arrows at the left of the screen to view more equipment IDs; the single arrows advance the display up or down one equipment ID at a time, while the double arrows advance the display up or down a whole screen at a time.

To select all equipment IDs, click on the **Select All** button at the bottom of the screen; to unselect all equipment IDs, click on the **Unselect All** button.

> **Note: Once selected, equipment IDs remain selected until you click on their buttons to unselect them, or click on the Unselect All button. You cannot unselect an equipment ID by clicking on the button of another equipment ID.**

Once the equipment IDs you wish to schedule are selected, you can select a date or date range. By default, the current date is the first date shown in the **Equipment Schedule** screen; if you need to select a date outside the range of visible dates, you can use the scrolling arrows at the top of the screen to advance the visible dates backward or forward a day or a screen at a time. You can also click on the name of a month to display that month (beginning with the current day of the month). The year shown in the schedule is displayed in

red in the upper right-hand corner of the screen next to the scrolling arrows. To advance backward or forward to a different year, click on the red triangles on either side of the year display. To return to today, click on the **Today** button next to the scrolling arrows on the left.

To select a date, click on the desired date button under the colored month bar. FaciliWorks will display the selected date at the top of the screen. To select a range of dates, click on the button for the first date included in the date range, then click on the button for the last date included. Again, FaciliWorks displays the selected range of dates at the top of the screen. As with equipment IDs, you must click on a date a second time to deselect it.

When you have selected the equipment IDs you wish to schedule and an appropriate date or date range, you can click on a status button below the schedule grid to display the appropriate status during the time selected. The status options available are **Maintenance, Storage, Being Used, Repair, Shipped,** or **Unusable.**

The **Select All** and **Unselect All** buttons at the bottom of the screen respectively select and unselect all equipment IDs. The **Draw Grid** button redraws the visible area of the equipment schedule grid after you have scrolled to a different part of the grid. The **Unschedule** button removes scheduling information for the selected equipment over the selected date range. The **Close** button closes the **Equipment Schedule** screen.

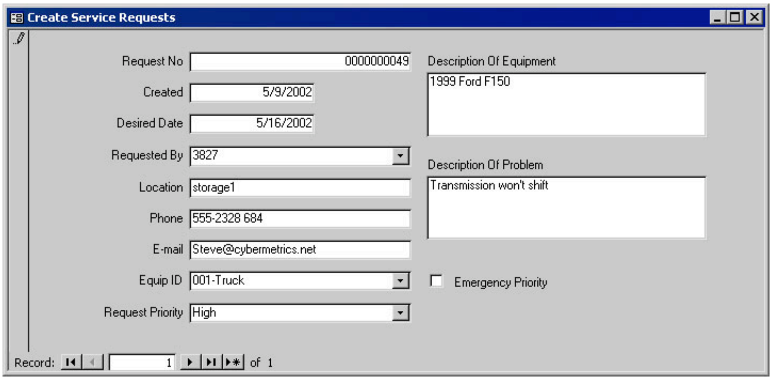
Chapter 15: Service Requests

FaciliWorks users who have full rights to the **Service Requests** section can view and edit all service request records. Supervisory-level users can immediately create work orders based on service requests, calendar-based service due, or metered service due. See **Security** on page 283 of the *System Administrator's Guide* for more information on setting up user access.

Employees in other departments can use the optional Service Request Module to enter requests (both workstation and web-based versions are available). These requests then appear in FaciliWorks for approval. For more information on the Service Request Module, please contact CyberMetrics or your distributor.

To add service requests, select **Create Service Requests** from the **Service Requests** menu. The **Create Service Requests** window appears.

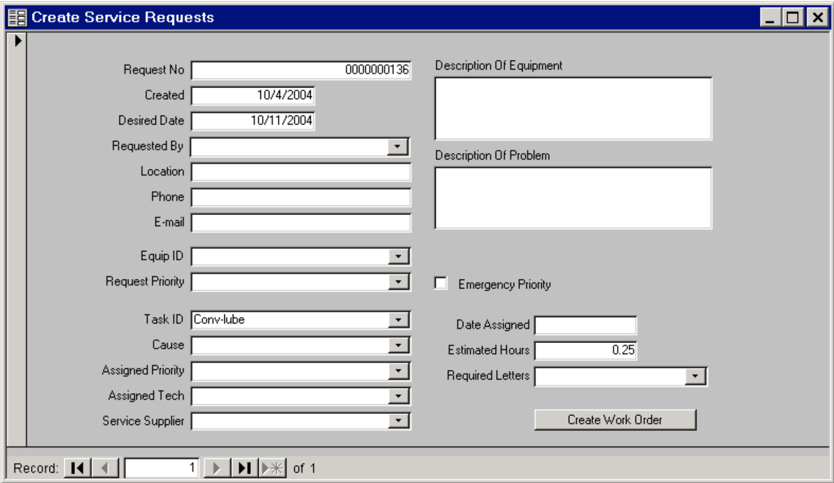
Create Service Requests



This table describes the fields and buttons in this screen:

Field/Button Name	Description
Request No.	FaciliWorks assigns a consecutive number to each service request. The format for this number is based on the format you created in the **Settings—Automatic Numbering** screen (for more information, see **Settings—Automatic Numbering** on page 270 of the *System Administrator's Guide*).
Created	The current date automatically appears in this field; you can edit it if necessary.
Desired Date	Enter the date the maintenance must be done by..
Requested By	Enter the name of the person requesting service.
Location	Enter the location of the equipment – department, building number, or other information. FaciliWorks fills in this field automatically if this information is available for the name entered in the **Requested By** field, but you can edit it if you wish.
Phone	Enter the phone number of the person who can provide information about the problem and schedule the service. FaciliWorks fills in this field automatically if this information is available for the name entered in the **Requested By** field, but you can edit it if you wish.
E-Mail	Enter the requester's e-mail address in this field. FaciliWorks fills in this field automatically if this information is available for the name entered in the **Requested By** field, but you can edit it if you wish.
Equip. ID	Enter or select the equipment's ID code.
Request Priority	Select a priority for the service request or enter a new priority description.
Description of Equipment	Enter a description of the equipment that needs service.
Description of Problem	Next, enter a detailed description of the problem and the service needed.
Emergency Priority	Check this box to indicate that this request is for emergency maintenance.

If, however, you marked the Automatically Create WO from Service Request checkbox in Settings – Options, a different screen will appear:

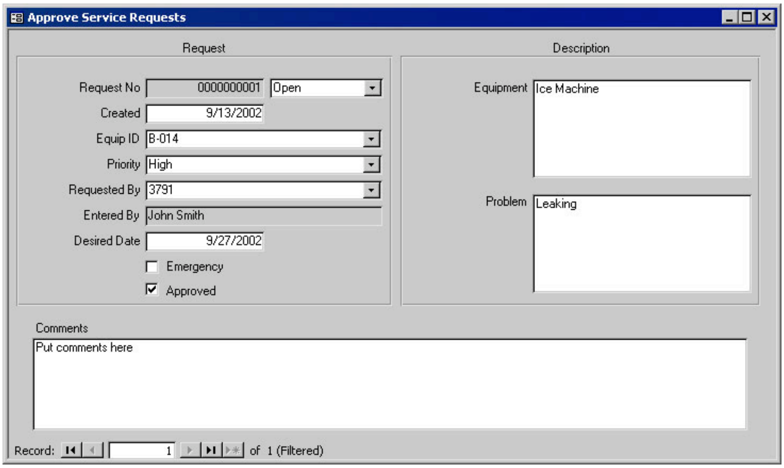


Note that the task you chose from the combo box in the *Default Task for Automatic Work Order* field in **Settings – Options** (see page 265) appears automatically in the Create Service Request Form.

Aside from the fields in this window, you also have the option to add any other information that will be displayed at the top of the screen. This can be used for anything – be it a reminder that says, for example, that the Maintenance Department only processes requests from 9 am to 5pm; or to let the users know that the form is only for normal priority requests and that they should call a specific number for critical priority requests. To add text, access **Setup – Settings – Options** and enter the copy in the textbox provided (see also **Setup – Settings – Options** on page 265).

Approve Service Requests

To approve service requests, you must have this permission in FaciliWorks' **Personnel – Security** utility (see **Security** on page 283 of the *System Administrator's Guide* for more information). To approve service requests, click on **Approve Service Requests** from the **Service Requests** menu. A window similar to this will appear:



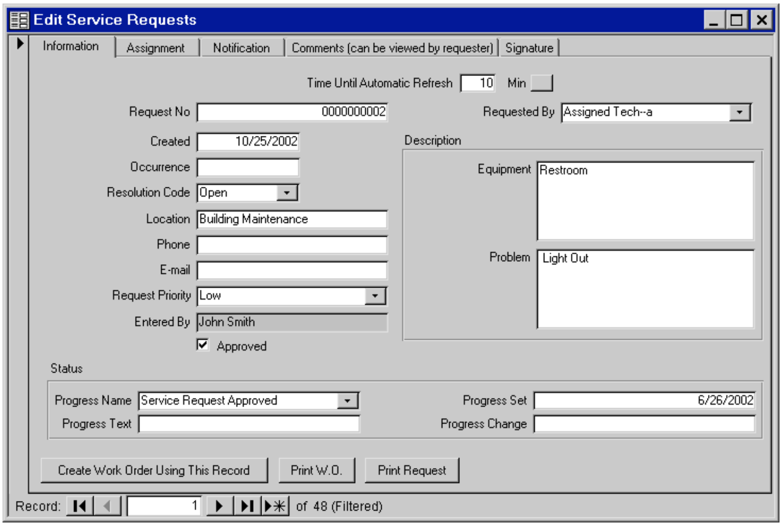
To approve the service request, place a check in the **Approved** box. After you close the **Approve Service Requests** window, the service request will be available in **Edit Service Requests.** You can create a work order from an approved service request.

Note: You may require that service requests must be approved before they can be made into work orders. See Settings—Options on page 265 of the *System Administrator's Guide* for more information.

Edit Service Requests

If you have rights to edit service requests, select this utility to modify or complete service request information. When you open this utility, the **Edit Service Requests – Information** screen appears.

Edit Service Requests—Information

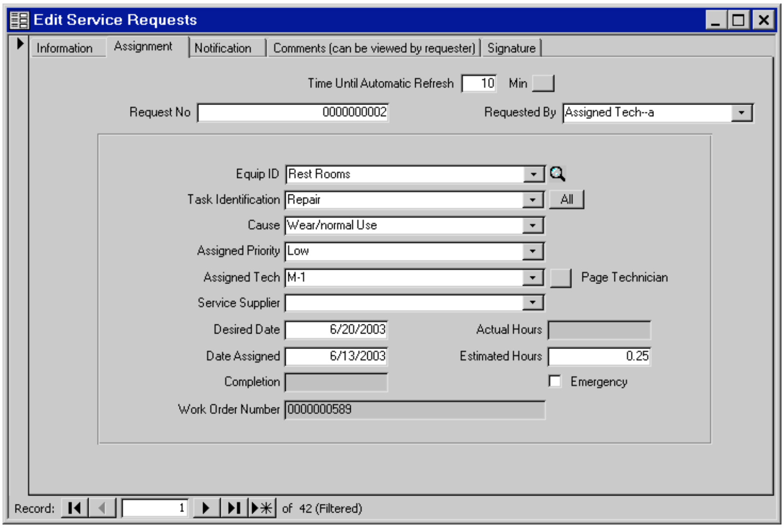


The fields and buttons in the **Information** screen are explained below.

Field/Button Name	Description
Time Until Automatic Refresh	This field shows how long the program will wait before it updates the information in this screen (based on entries made by other FaciliWorks users). Click on the button at the right to immediately update the screen.
Request No.	FaciliWorks assigns a consecutive number to each service request. The format for this number is based on the format you created in the **Settings—Automatic Numbering** screen (for more information, see **Settings—Automatic Numbering** on page 270 of the *System Administrator's Guide*).
Requested By	Enter the name of the person requesting service.
Created	The current date automatically appears in this field.
Occurrence	Enter the date the problem occurred
Resolution Code	Select the status of the service request—**Open** or **Closed**. **Note:** When maintenance is completed, be sure to change this status to *Closed.*
Location	Enter the location of the equipment. FaciliWorks fills in this field automatically if this information is available for the name entered in the **Requested By** field, but you can edit it if you wish.
Phone	Enter the phone number of the person who can provide information about the problem and schedule the service. FaciliWorks fills in this field automatically if this information is available for the name entered in the **Requested By** field, but you can edit it if you wish.

Field/Button Name	Description
E-Mail	Enter the requester's e-mail address. FaciliWorks fills in this field automatically if this information is available for the name entered in the **Requested By** field, but you can edit it if you wish.
Request Priority	Select a priority for the service request or enter a new priority description.
Entered by	This field shows who submitted the service request; it cannot be edited.
Approved	Check this box to show that the request is approved.
Equipment	Enter the equipment ID or a brief description of the equipment.
Problem	Enter a detailed description of the problem and the service needed.
Progress Name	This field shows the status of the service request. By default, FaciliWorks automatically updates the status of service requests when they are created, approved, or closed, and of work orders when they are created or completed. If you wish, you can change the status of the service request by choosing from the drop-down list. For information on editing progress names or creating new ones, see *Work Order/Service Request Status*, on page 278 of the *System Administrator's Guide.*
Progress Text	Enter comments on the status of the service request, e.g., "Part Number X-0011 on backorder."
Progress Set	FaciliWorks automatically enters the date of the last change in the progress of this service request. You can edit this date if you wish.
Progress Change	Enter the date you expect the progress of this service request to change next; e.g., if you are waiting for a part, enter the date you expect to receive the part.
Create Work Order Using This Record	To immediately create a work order, based upon the information entered and selected on the **Assignment** screen (discussed next), click this button. The work order will include all previously entered information that applies to the task.
Print W.O.	Opens a print preview of the Work Order ready for printer output
Print Request	Opens a print preview of the Service Request ready for printer output

Edit Service Requests—Assignment

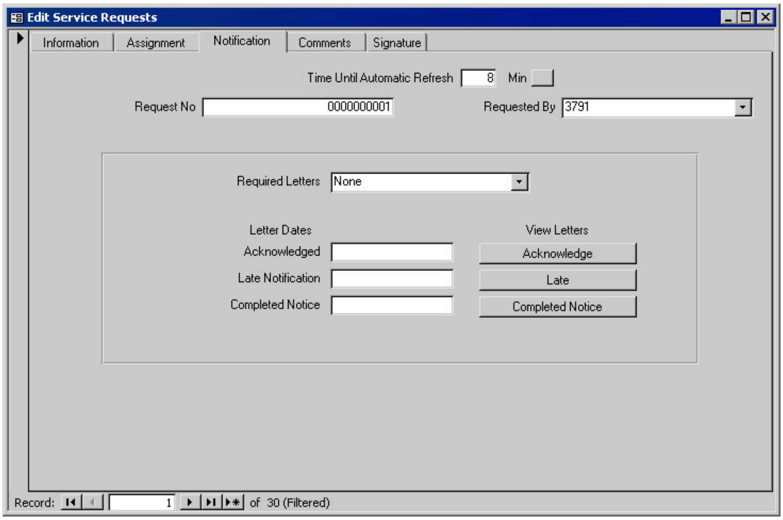


Go to the **Edit Service Requests—Assignment** screen to assign a task ID, priority, and technician to the service request. The table below explains the fields in this screen.

Field Name	Description
Time Until Automatic Refresh	This field shows how long the program will wait before it updates the information in this screen (based on entries made by other FaciliWorks users). Click on the button at the right to immediately update the screen.
Request No.	FaciliWorks assigns a consecutive number to each service request. The format for this number is based on the format you created in the **Settings—Automatic Numbering** screen (for more information, see **Settings—Automatic Numbering** on page 270 of the *System Administrator's Guide*).
Requested By	Enter the name of the person requesting service.
Equip. ID	Enter or select the equipment ID from the list.
Task ID	Select the appropriate task ID from the list. This list shows only tasks linked to this equipment. Click the **All** button next to this field to see all of the tasks in your database (click it again to go back to the original list).
Cause	Select a reason for the service request. Causes are defined during program setup. See **Work Order Cause Entry** on page 275 of the *System Administrator's Guide* for more information.
Assigned Priority	This field shows the priority originally given to the task. You can change it.
Assigned Tech.	This field shows the name of the technician originally assigned. You can select another technician, if you wish.

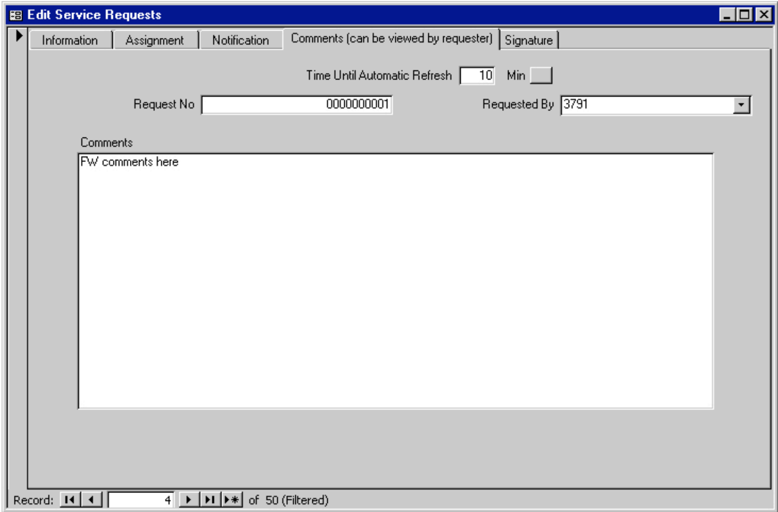
Field Name	Description
Page Technician	If your computer has a modem connected to a telephone line, use this button to page the selected technician. When you click this button, a dialog box will appear, displaying the pager number of the selected technician (as entered in the *Pager* field in **Personnel | Staff Entry | Information**) and the numeric message (as entered in the *Phone No.* field in **Setup | Settings | User Info**). You can edit these fields if you wish. Once you have confirmed that the numbers in the *Pager Number* and *Numeric Message* fields are correct, click on *Page* to activate Phone Dialer and page the technician. The *Close* button closes **Page Technician** without performing any action or saving any changes.
Service Supplier	This field shows the name of the service supplier originally linked to the task. You can select another service supplier, if you wish.
Desired Date	Enter the date the work should be completed. FaciliWorks automatically assigns a date of one week from the current date.
Date Assigned	If you've already assigned the task, enter the date on which you assigned it.
Completion and Actual Hours	When the technician completes the work, the completion date and actual hours needed automatically appear in these fields.
Estimated Hours	This field shows the estimated hours for the task. You can change it.
Emergency	Check this box to indicate that this request is for emergency maintenance.
Work Order Number	FaciliWorks displays the work order number assigned to the request. This field may be empty if no work order has been assigned to the particular request yet.
Work Order Status	FaciliWorks displays the progress status of the work order (set in **Edit Service Requests—Information**) in this field.

Edit Service Requests—Notification



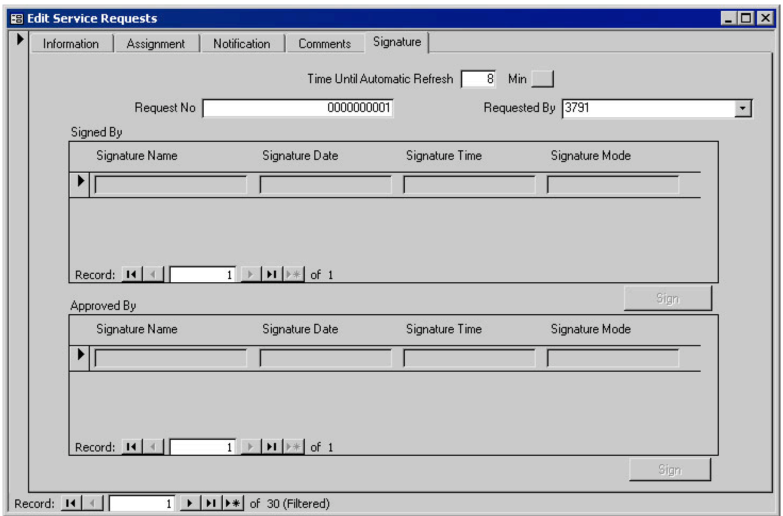
This screen lets you create, print, or e-mail correspondence related to service requests, including acknowledgments, late notifications, and completion notices. If you send letters from this screen, FaciliWorks automatically puts the current date in the appropriate **Letter Dates** field. You can also manually enter these dates. To preview each letter, click the appropriate **View Letters** button. These letters are preformatted and can be modified only from the **Setup-Service Request Letter Entry** screen. For information on how to do this, see **Service Request Letter Entry** on page 277.

Edit Service Requests—Comments (can be viewed by requester)



In the **Comments** screen, enter any other information about the request.

Edit Service Requests-Signature



To use the signature feature, you must first activate security by checking the checkbox labeled **Enable Security** under **Settings—Options**. (For more information, see **Settings—Options** on page 265 of the *System Administrator's Guide*.)

When you want to sign a record as completed, click the **Sign** button. This creates a new signature record containing the user's name, the date, and the exact time. (The label on the **Sign** button changes to **Unsign** at this time, as well.) Once it has been signed, then the **Approved By** box can be signed. Once a record has been signed, it cannot be edited by anyone. A signed record can only be made editable if the original signer unsigns it; if the record's approval has been signed, the approval must be unsigned by the person who signed it before the record can be unsigned.

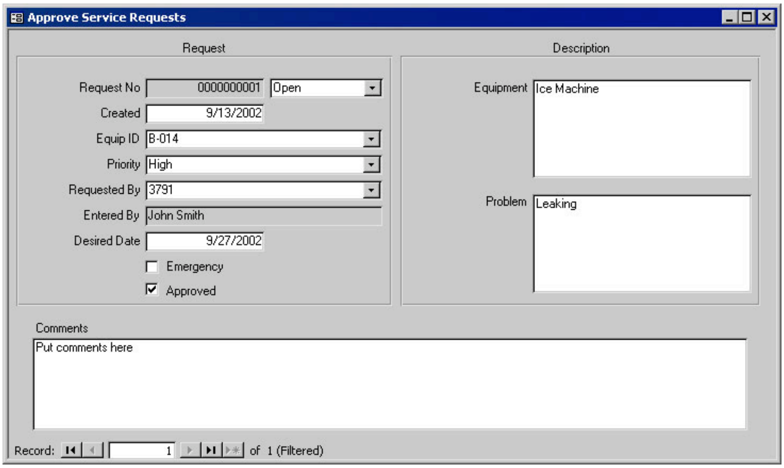
> Note: **You can require users to enter their login name and password whenever they click the *Sign/Unsign* button by checking the checkbox labeled *Electronic Signature Login* under** Settings—Options. **(For more information, see *Settings—Options* on page 265 of the System Administrator's Guide.) If this option is not enabled, FaciliWorks will sign the record with the User Name of the user who is currently logged in.**

Work Orders from Service Requests

If you create a work order from a service request, the service request number automatically appears in the **Work Order Entry–Information** screen. When you complete the work order, FaciliWorks updates the completion date and hours in the service request record and marks it closed. You can then preview any assigned letters, and FaciliWorks will enter the current date as the letter sent date in **Service Request Entry**.

Approve Service Requests

To approve service requests, you must have this permission in FaciliWorks' **Personnel – Security** utility (see **Security** on page 283 of the *System Administrator's Guide* for more information). To approve service requests, click on **Approve Service Requests** from the **Service Requests** menu. A window similar to this will appear:

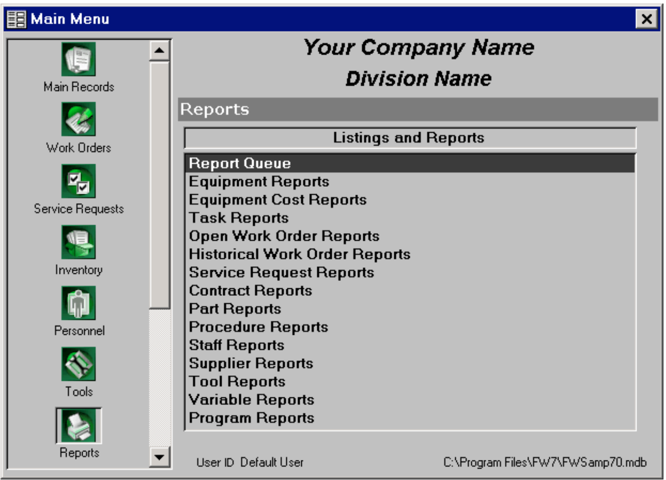


To approve the service request, place a check in the **Approved** box. After you close the **Approve Service Requests** window, the service request will be available in **Edit Service Requests.** You can create a work order from an approved service request.

Note: You may require that service requests be approved before they can be made into work orders. See Settings—Options **on page 265 of the *System Administrator's Guide* for more information.**

Chapter 16: Reports

FaciliWorks includes a large variety of standard reports. To print or view reports, go to the Main Menu and click on the **Reports** button on the left-hand side. You'll see a list of different report groups, such as **Part Reports** and **Task Reports.** Click on the name of the group you want; FaciliWorks will display below it a list of the reports in that category.



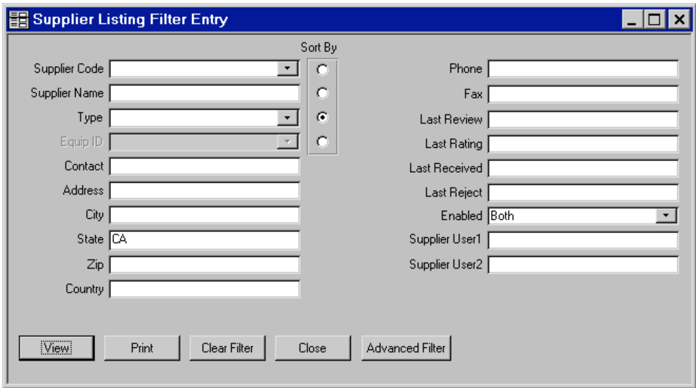
Report Filters

Each report opens with a filter window. This window lets you define a specific group of records to analyze; some reports let you sort the data according to your preference. Many

reports give you a choice between a summarized listing and a detailed report. Most of the report filters contain special options, which we'll discuss next.

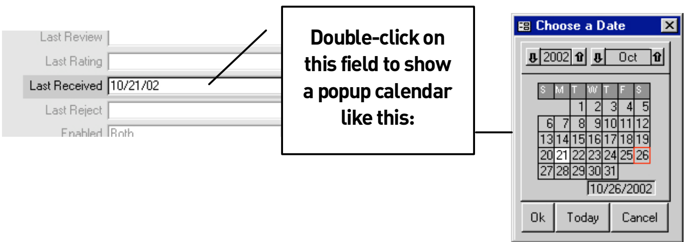
Sort By

If the filter has a **Sort By** option, it means that you can choose how to organize the report. Click on a circular radio button in the *Sort By* column to the right of the field listing to choose the field you want to sort by. In the sample filter below, the user wants to see a list of suppliers from California, sorted by supplier type.



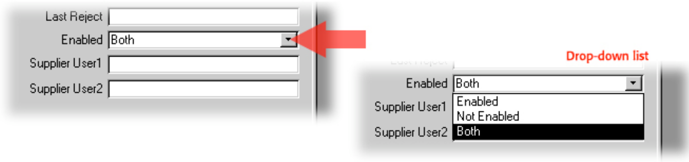
Date Fields

Type a date directly into a date field or double-click in a date field to select a date from the pop-up calendar.



Drop-down Lists

When a filter field has an arrow at its right-hand side, click the arrow to see a drop-down list of available entries. Highlight any item to select it. You can also start typing in the information you want; FaciliWorks will go to the first entry in the list that starts with the characters you typed.

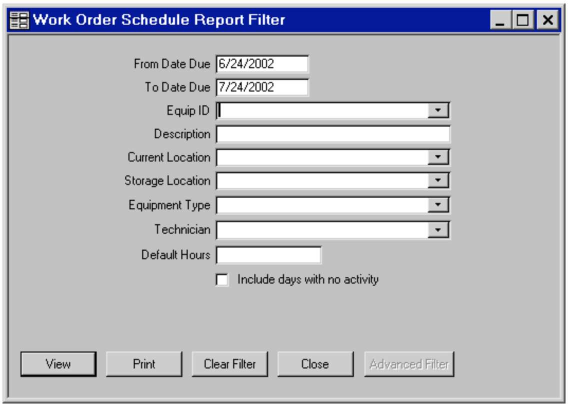


User Defined

The two **User Defined** fields appear on many reports. You can customize these and other field names; your custom names will appear in entry screens, report filters, and reports. See **Changing Field Labels in FaciliWorks** on page 274 of the *System Administrator's Guide* for more information about custom field labels.

Checkboxes

Some report filters have checkboxes, which you can use to include additional information or limit the report by a particular field. If you don't know how a checkbox will affect your report, place a check in it and click **View** to see how the report changes. In the sample filter shown below the user left the **Include days with no activity** box unchecked so that his Work Order Schedule Report would show only days on which work order activity took place.

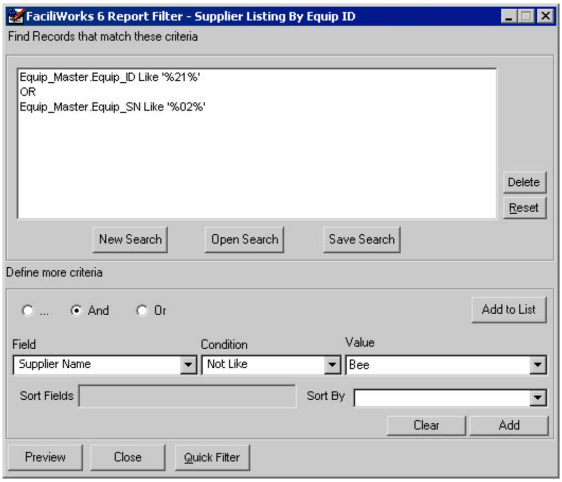


Report Filter Buttons

Button Name	Description
View	To see a **Print Preview** of the report, click this button.
Print	Click this button to print every page of the report without previewing it.
Clear Filter	If you enter filter information and then decide to change it, click this button to remove your filter entries (even if you've just previewed the report).
Close	When you're finished viewing or printing the report, click the *Close* button.
Advanced Filter	This option lets you create more complex criteria for filtering your report. See the next section for a detailed explanation of the **Advance Filter**.

Advanced Filter

With **Advanced Filter** you must build criteria for your report to act as your records filter. You can save a filter by giving it a name and open it again for reuse. By selecting the **Save Search** button, you can specify a filter name in the **Report Filter** dialogue window.



Field/Button Name	Description
Criteria	Displays a listing of the generated criteria. Criteria can be combined by using the OR button; before adding another criterion be sure to click on the OR button
New Search	Click to create a new filter name
Open Search	Opens a list of previously saved search criteria
Save Search	Saves newly created or modified criteria
Radio Buttons: ..., And, Or	When defining criteria, use these buttons to connect criteria. Use "And" if both premises must be true; "Or" if only one premise must be true.
Add to List	Adds your defined criteria to the criteria list
Field	This drop-down list shows all the fields you can search in the selected report. Field names appear as column headings in the printed report.

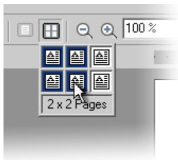
Field/Button Name	Description
Condition	This drop-down list shows the field operators you can use to create search criteria. You can choose from these operators: **contains** – the value listed is a subset or is part of the search field **begins with** - the search field begins with the value listed **ends with** - the search field ends with the value listed **is between inclusive** – the value listed is within the contents of the search field from the first to the last entries **is between exclusive** – the value listed is between the first and the last entry of the search field. **not like**—the value listed is not a subset of or is not part of the search field. **=** - the search field matches the value listed exactly ←→ - the search field is not equal to the value listed ← - the search field is less than the value listed. →- the search field is greater than the value listed. ←=- the search field is less than or equal to the value listed. →=- the search field is greater than or equal to the value listed. **Is** & **Is Not** – this works only in conjunction with the **Null** value (empty field).
Value	Enter a value to be used in your search. Values may be letters and/or numbers, or a date; however, the Value field will not permit you to enter letters in a numeric field. It will also allow only dates in a date field. Entry conventions are described in **Supported Wildcard Characters in SearchFields** on page 45.
Sort Fields	This field lists the Sort By fields you have selected, separated by commas.
Sort By	This drop-down list shows available sort fields. Records are ordered with this field as reference.
Clear	Resets Sort By field
Add	Adds value of Sort By field to the Sort Fields entry.
Preview	Previews the report. From the preview, you can choose whether to print or e-mail your report.
Close	Closes the Report Filter window.
Quick Filter	Returns you to Quick Filter.

Print Preview

To preview a report onscreen, click **View**. Use the scroll bars to move through your report. Click the navigation buttons in the lower left corner of the viewing window to go to other pages. To zoom in or out, click anywhere in the body of the report.

Report Toolbar

Use the report toolbar to quickly perform common functions in **Print Preview**.

Button	Description
Print	Prints the report.
Send	E-mails the current report (see below for more information).
Zoom Out	Displays a larger area of the page.
Zoom In	Displays a portion of the page close up.
Zoom	Selects a specific percentage value for magnification.
Copy	Copies the entire page so it can be pasted into other programs. You can paste it directly to a word processing page and it automatically formats the page to accommodate the report. Pages are copied as editable text to word processing programs and as a bitmap image to graphics programs.
Single Page	Displays one page on the viewing window
Multiple Page	Selects multiple page display by dragging the cursor to select rows and columns as shown below: 

Other Report Options

Output To

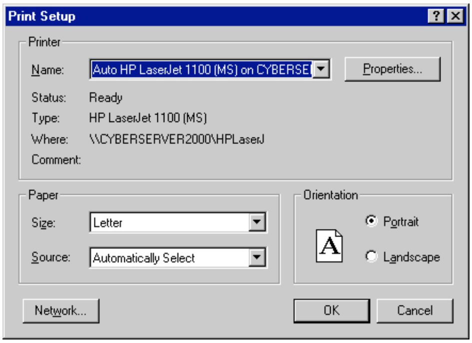
Choose **Output To** from the **File** menu to export reports as text file, Microsoft .RTF, .HTML, or Microsoft Excel spreadsheet format (.XLS). If you save a file in .RTF format and open it in a word processing application such as Microsoft Word, your data appears in a formatted table. When you save the output in .XLS or .RTF format, it includes fonts, layout, and other formatting elements.

Send

Select **File | Send** to output reports to Microsoft Outlook or any other MAPI compatible mail program. The output does not include subforms and subreports. When you save the output in .XLS or .RTF format, it includes fonts, layout, and other formatting elements.

Print Setup

Select **Print Setup** from **File** menu to change report settings, such as page size or orientation (Portrait or Landscape). The type of printer and Windows printer driver you have will determine some of the options that are available, but a typical setup window looks like this:



Tip: To save paper and time, first view the report on-screen, then adjust the print setup values. You'll see changes immediately after you click *OK*.

In order to save report settings, you must have this option enabled in the **Settings–Options** screen (see page 265 of the *System Administrator's Guide* for more information). You cannot permanently change the settings for the following complex reports: **Equipment Listing**, **Work Order Due Listing**, and **Supplier Listing**.

You can print one, several, or all pages of a report. After you view or print a report, be sure to close it to conserve system resources.

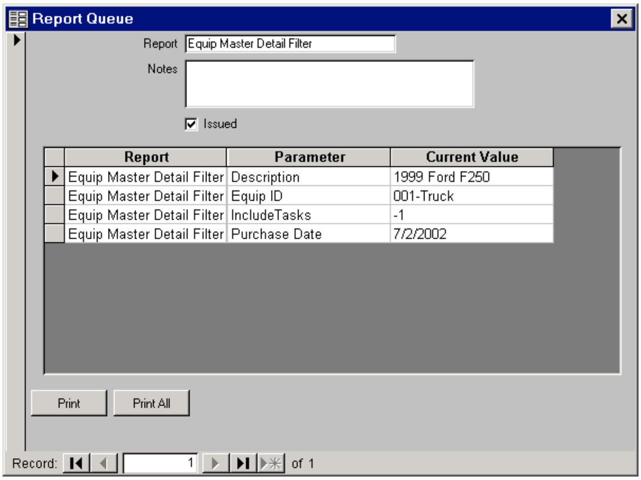
Reports—Descriptions

The following tables contain a summary of each report, including any special filtering options. Look at each report and filter on-screen as you read the description.

Report Queue

The Report Queue allows the user to store the most frequently used criteria. Once a filter criteria has been set up, you can simply add this to the queue. Once saved, you can easily retrieve your filter criteria, or print it directly from the Report Queue.

This feature also permits users to save multiple sets of criteria for each report. These criteria may have fixed dates, such as January 31, 2003, or variable dates such as '30 days before the current date.' Printing of several reports consecutively is also allowed.



Equipment Reports

Report	Description
Agreement Due Listing	Creates a report showing when warranties and service agreements are due to expire. Other information includes *Equip ID, Description, Current Location, Effective Date, Warranty Cost, Equip User 1, Equip User 2, Storage Location, Storage Location, Expiration Date,* and *Agreement Term.*
Component Listing Report By Child	Creates a report with a tree view of every child component showing all components attached to each child component. Other information includes *ID, Serial No., Description, Type, Current Location* and *Agree. Freq.*
Component Listing Report By Parent	Creates a report with a tree view of every parent component showing all components attached to each parent component. Other information includes *ID, Serial No., Description, Type, Current Location* and *Agree. Freq.*
Equipment Analysis	These reports help you manage resources and plan for equipment replacement. Use it to compare specific types of equipment or equipment at a specific location to quickly determine which items use the most maintenance, time, and parts, as well as total cost. You can also analyze each cost category for specific equipment for a period of time. These reports are categorized by: 1. Contract Costs 2. Downtime Hours 3. Labor Costs 4. Labor Hours 5. Part Costs 6. Total Costs 7. Work Orders

Report	Description
Equipment Bar Code Labels	Use this report to print bar code labels for your equipment. In the filter, you can select the width of the label (_", 1", or 1_"). The length of the bar code determines the label length; FaciliWorks will print the shortest possible label. To print bar code labels, you must have the Maintenance Label Kit. For information on the Maintenance Label Kit, see *Appendix A: Maintenance Label Kit* on page 219.
Equipment Detail Report	This report shows detailed equipment information, including *Status, Importance, S/N, Manufacturer, Current/Storage Locations,* and more.
Equipment Listing	Use this report to see a list of a particular group of equipment. Equipment Listing Reports are categorized by: 1. Current Location 2. Current Location with Tasks 3. Description 4. Description with Tasks 5. Equipment Type
Equipment Status Report	The **Equipment Status** report creates a summarized list of equipment, based on the status you select. Use this report to print a list of all inactive equipment or items in need of repair. You can also print a list of your spare or backup equipment. If you leave the *Status* field blank, the list will include equipment of any status. Equipment Status Reports are categorized by: 1. History By Equip ID 2. History By Status 3. History Summary 4. All Status
Equipment Usage History	The **Equipment Usage** report gives you a detailed log of when, where, and for what purpose you've used equipment during a specific time frame. You can filter for equipment issued to one or more departments, for one or more purchase orders, or for one or more part numbers. This report helps you provide documentation for billing and cost accounting, and it can be a valuable tool for long-term equipment purchase and replacement planning.

Equipment Cost Reports

Report	Description
Equipment Analysis by Contract Cost With Component	Analysis of Maintenance (Scheduled and Unscheduled) Costs for Equipment. This report includes the cost of child equipment as part of the cost of the parent equipment; hence the term "with component." This report is sorted by the cost of Contract items for the maintenance.
Equipment Analysis by Labor Cost With Component	Analysis of Maintenance (Scheduled and Unscheduled) Costs for Equipment. This report includes the cost of child equipment as part of the cost of the parent equipment; hence the term "with component." This report is sorted by the cost of Labor items for the maintenance.
Equipment Analysis by Labor Hours With Component	Analysis of Maintenance (Scheduled and Unscheduled) Costs for Equipment. This report includes the cost of child equipment as part of the cost of the parent equipment; hence the term "with component." This report is sorted by the number of Labor hours for the maintenance.

Report	Description
Equipment Analysis by Part Cost With Component	Analysis of Maintenance (Scheduled and Unscheduled) Costs for Equipment. This report includes the cost of child equipment as part of the cost of the parent equipment; hence the term "with component." This report is sorted by the cost of Part items for the maintenance.
Equipment Analysis by Total Cost With Component	Analysis of Maintenance (Scheduled and Unscheduled) Costs for Equipment. This report includes the cost of child equipment as part of the cost of the parent equipment; hence the term "with component." This report is sorted by the total cost of Contract, Parts, and Labor items for the maintenance.
Equipment Analysis by Work Order With Component	Analysis of Maintenance (Scheduled and Unscheduled) Costs for Equipment. This report includes the cost of child equipment as part of the cost of the parent equipment; hence the term "with component." This report is sorted by work order.
Operating Costs Detail Report	This report is a detailed listing of the costs from all of the operating costs forms with equipment.
Other Costs Detail Report	This report is a detailed report of all of the fields from the other costs form with equipment.
Other Costs Summary Report	This report is a summarized listing of other costs.

Task Reports

Report	Description
Shadowed Task Listing	This report allows you to search by any criteria in order to see a listing of equipment and its shadowed tasks.
Task Detail Listing	This filter lets you search for tasks by ID, priority, type, or assigned technician. Use the *Shutdown* checkboxes to isolate tasks that require equipment or facility shutdowns. Task details include all labor, contracts, parts, tools, variables, and procedures required for each task, including whether the maintenance schedule is *Fixed* or *Floating*.
Task Due Listing by Equip ID	This filter lets you search for tasks by equipment I
Task Required Parts List	This task listing includes basic task information such as *ID, Priority, Technician, Type* and *Time Needed to Perform Maintenance*, plus a listing of required parts per task.

Open Work Order Reports

Report	Description
Backlog Work Orders	This report lists active equipment that is past due for maintenance based on date or meter reading.
Open Work Orders from Requests	Select this report to see a summary of work orders, filtered by date, equipment ID, task ID, cause, requester, or technician. You can also filter for complete or incomplete work orders and for emergency or non-emergency work orders.

Report	Description
Work Order	The Work Order report gives a technician all information required for organizing tools, parts, and labor required to complete his work, as well as the procedures for performing each task. Use this report to view work orders created or completed during a specific time period. You can view or print work orders for one or more technicians, locations, equipment, or tasks. You can also choose to view only emergency or non-emergency work orders (or both) and/or only complete or incomplete work orders (or both).
Work Order Actual Work Hours by Technician	A compact listing of work orders detailing the actual hours worked by the technician.
Work Order Compact with Full Proc Text	A compact listing of work orders, including meter readings, due dates, tool listings and complete procedure text for each work order.
Work Order Compact with Proc Name Only	Same as above, but with only Procedure names.
Work Order Detail For Current User	This report is used to print a detailed list of work orders where the current user is the Technician. The administrator must set up the Staff User list for this report to function.
Work Order Due Listing by Equip ID	Use this filter to create a list of work orders for every equipment ID. You can print work orders due for a day, a week, a month, or any other time period. Use the *Include Past Due* checkbox to include any work orders that are past due, based on the current date.
Work Order Progress	This report shows the progress of your current work orders. You can filter for date range on progress set, date range on progress change, equipment ID, progress name, requester, and priority.
Work Order Schedule Summary	Select criteria for this report using the same method you would use to manually plan your maintenance schedule. You can organize your schedule by workers, location, or type of equipment, so you know about scheduling conflicts before they occur. Don't use too wide a date range (such as ten years), because the report will take a long time to generate. You can also choose to include days without scheduled activity, and you can establish a default estimate of hours for work orders that don't have scheduled hours. Work Order Schedule reports can be viewed by: 1. Day 2. Day of Week 3. Day with Detail 4. Month 5. Quarter 6. Week 7. Year
Work Order Summary	This report gives a listing of all Work Orders with completion status and date ordered by *Equip ID.* It also includes equipment *Description, Task ID* and *Task Type.*
Work Order Summary for Current User	This report is used to print a summarized list of work orders where the current user is the Technician. The administrator must set up the Staff User list for this report to function.

Report	Description
Work Orders by Location	This report shows you work order information for equipment located in a certain location (use the *Current Location* field). You can also filter by date range or equipment ID.

Historical Work Order Reports

Report	Description
Cost Center Average Downtime	These reports give a listing of *Average Downtime by Cost Center* including *Total Work Orders for each Cost Center.*
Creation To Close	This report details the amount of time in hours from the creation of a work order to when it was closed. This is useful to see an overall picture of the time it takes for the Maintenance department to solve an issue.
Equipment Type Average Downtime	This report gives a listing of Average Downtime for Each Equipment and the Total Work Orders scheduled for each piece of equipment.
Labor Hours Report	This report will show the total number of labor hours that have been spent on a work order. This is useful for determining the areas of maintenance that take up the most amount of time and could benefit most from improvements in work flow or management.
Multiple Equipment Word Order	This report will provide a list of all equipment that needs the same task performed on it. This can be used to perform work orders where the exact same steps need to be performed on many pieces of equipment.
Open to Started Report	This report will detail the amount of time that it takes from when a work order is generated to when work begins on it. By isolating the time it takes for the work order to begin, this will allow the administrator to see if there needs to be improvements to the process of notifying work order technicians when they have new work to complete.
Started to Close	This report will detail the exact time it takes from when the work order is started to when it is completed. This information will be used to determine if the expected downtime and labor time is correct for the actual work being done. This will also allow the administrator to analyze work patters to determine employee efficiency.
Technician Average Downtime	This report gives a listing of technician Average Downtime and the total number of Work Orders assigned to each technician.
Work Order Cause Downtime	These reports give a listing of Average and Total Downtime including Total Work Orders for each Work Order Cause or reason for issuance of Work Order.
Work Order Compare	Use this report to compare the costs of scheduled and unscheduled work orders. You can view costs for equipment; equipment and tasks; or for equipment, tasks, and work orders combined. Smaller reports are also available to show: These reports are categorized by: 1. Equip & Task Only 2. Equip Only 3. With Component

Report	Description
Word Order Cost Analysis	The Work Order Cost Analysis report gives you a quarterly total of work order costs. Use it to quickly see summarized annual work order costs filtered by equipment, tasks, technicians, or locations. The Print Preview of the report shows you total categorized work order costs for the year, compared to the previous year and the equipment's lifetime. **Work Order Cost Analysis with Component** includes work order costs from all attached components.
Work Order Cost by Cause	Use this report to see your work order information sorted by cause (i.e., the *Cause* field for each service request or unscheduled work order). Each cause will have its own page in the completed report. The filter window lets you search by equipment or task ID; dates created or done; cause; technician; and work order number. You can also choose to see only emergency maintenance, non-emergency maintenance, or both.
Work Order Costs and Labor	This report summarizes each task, including the costs for contracts, labor, and parts, along with category totals and a grand total. The filter lets you isolate maintenance costs by equipment, task, location, or technician. You can filter for one task ID and compare the cost of the same task for different equipment or for different technicians. You can also isolate emergency work orders for comparison with scheduled and unscheduled work orders. **Work Order Costs & Labor with Component** includes work order and labor costs from all attached components
Work Order Due Report Automatic	This is the Work Order Due Report that opens when you launch FaciliWorks, showing equipment IDs that are due or past due for maintenance. If you have no due or past due tasks, a dialog box will pop up and tell you that no equipment was due for maintenance.
Work Order History	The Work Order History report and filter are similar to the Work Order filter and reports. You can select work orders for one or more technicians, locations, equipment, or tasks. The filter lets you select work order created and completed date ranges. Work Order History shows comprehensive work order information; Work Order History Summary shows only the work order number, date done, cause, technician, and total hours, Work Order History With Components includes the work order history from all attached components.
Work Order History Summary	This report provides a compact summary of all work perfomed on each piece of equipment based on the task. This will allow the administrator to get a picture of what equipment and what tasks require the most time and maintenance.
Work Order History with Component	This report is a detailed work order report that includes the components that belong to that equipment. Components are subassemblies that are considered part of the equipment, but may be removed at a later date. By including the components in the work order, the user can get a detailed list of all the equipment and subassemblies that are affected by the particular work order.

Report	Description
Work Order on Time Analysis	This report shows both the number and percentage of your work orders that are completed early, late, or on time, according to your equipment's maintenance schedules. You can filter for a date range, equipment ID, task ID, technician, cause, description, type, and whether the work order is an emergency. These reports can be filtered by: 1. Equipment 2. Task 3. Technician
Work Order Percentage Completed	This report displays the number of work orders that have been completed vs. the number of work orders that are still open. This is useful in predicting the resources needed to complete the work orders as well as providing an up to date progress report for the maintenance department.
Work Order Progress History	This report shows the progress of your current work orders. You can filter for date range on progress set, date range on progress change, equipment ID, progress name, requester, and priority.
Work Order Scheduled vs Unscheduled	This report shows for each equipment ID how many work orders were unscheduled, how many were scheduled, what percentage were unscheduled, and what percentage were scheduled. You can filter only for date range on due date.

Service Request Reports

Report	Description
Service Request Progress	This report shows the progress of your current service requests. You can filter for date range on progress set, date range on progress change, equipment ID, progress name, requester, and priority. Use this report to filter for Service Requests only.
Service Request Progress History	This report shows the history of progress changes of your current service requests. You can filter for date range on progress set, date range on progress change, equipment ID, progress name, requester, and priority.
Service Requests Summary	Use this report to view and print a summary of service requests, listing service request number, entry date, requester, name, equipment ID, desired date, status, and emergency status. The filter lets you search by date, requester, equipment ID, cause, service supplier and status (open or closed).
Service Request Total Hours	Use this report to view or print a service request summary listing requester, date, desired date, priority and hours estimate and actual, with corresponding comments. The filter lets you search by date, requester, equipment ID, cause, service supplier and status (open or closed).
Service Requests	Use this report to view and print detailed service request reports. The filter lets you search by date, requester, equipment ID, reason for request, and request status (open or closed).
Service Requests by Requester	Select this report to see a list of service requests sorted by requester. You can filter for a date range, or by status, equipment ID, or request priority.

Contract Reports

Report	Description
Contract Listing	This report lists your maintenance contracts. Using the filter window, you can choose contracts with a certain reference code, contracts of a certain rate, or contracts with a particular supplier.

Part Reports

Report	Description
Part Bar Code Labels	Use this report to print bar code labels for parts. You can select from label widths of _", 1", or 1_". FaciliWorks determines label length by the length of the bar code; it prints each label on the shortest length possible. To print bar codes, you must have the Maintenance Label Kit. For information on the Maintenance Label Kit, see *Appendix A: Maintenance Label Kit* on page 219.
Part Consumption	This list summarizes parts used during each month. It calculates the total used for the time period you select, as well as the total cost, based on the part's current cost multiplied by total number used. Generate this report for one year at a time to see current part consumption information.
Part Listing	Use these reports to print detailed parts listing reports for all parts and for unattached parts. Both reports display all of the available information about each part included on the report. You can filter reports by Part No. and/or Equipment ID. You can filter reports by: 1. Unattached 2. Critical 3. Detail 4. with Warehouse Info
Part Location Listing	
Part Low Stock	Use this report to view or print a list of critical parts with quantities below their reorder points. Whenever a part's current quantity in stock is less than its specified reorder point, FaciliWorks alerts you by highlighting the quantity in stock value in yellow. This report can also be sorted by With Critical Parts Only.
Part Reorder Calculation	This report calculates the number of parts that you used in the past and, taking required delivery time into account, calculates how many parts you need to order to meet future needs (based on your current needs). You can filter for one or more part numbers, or leave the *Part No.* field blank to see reorder information for all of your parts. The dates in the filter automatically default to the last three months, but you can change them.
Part Valuation by Part No.	This report lists the total number of each part in stock and the cost of the entire stock of each part, sorted by part number. Description, and supplier for each part are also given. You can filter for part number, supplier, class, or ABC stock. To show only critical parts, check the *Show only critical parts* checkbox.
Parts Out of Stock	Choose this report to view or print a list of parts that are out of stock.
Purchase Order History Listing	Use this report to view a historical list of purchase orders for each supplier.

Report	Description
Purchase Order Summary	Use this report to view or print a summary of purchase orders placed with each supplier, ordered by supplier code.
Purchase Orders	Select this report to print your purchase orders. You can filter for orders by requisition or purchase order number; who created or approved the order; supplier code; when the shipment is due; and whether you received the order.
Re-Order Part Listing	This is the report that opens when you click the *View Orders* button in **Create Purchase Orders**. For further information, see *Create Purchase Orders* on page 120.

Procedure Reports

Report	Description
Procedure Listing	Procedures can be listed by equipment ID or procedure name. *Procedure Listing* gives a detailed procedure listing in order of procedure code; *Procedure Listing by Equip ID* is a summary grouped by Equip ID; and *Procedure Listing by Procedure Name* lists procedures and shows the equipment assigned to those procedures. *Procedure Listing, with Attachments*, on the other hand, displays reports with attached files or images.

Staff Reports

Report	Description
Craft Performance	Use this report to view or print craft performance statistics on productivity. You can view overall statistics or filter to a single employee and his craft.
Payroll Report	This report is designed to show all the labor records by employee as well as listing the task and work order the labor was performed on. This is useful for companies that require technicians to bill their hours to certain departments or job codes. The employee can print out this report to see all jobs that they have worked on in a set period of time.
Staff Cert. Due Listing	Use this report to generate a list of employees whose certifications will expire within a given time period.
Staff Labor Performance Detail	This report lists work orders and the employee(s) assigned to them. It shows estimated number of hours compared to actual maintenance time. In the filter window, you can search by the creation or completion dates; employee ID or craft code; and equipment or task ID. You can also choose to see only emergency, non-emergency, or both types of work orders.
Staff Labor Performance Summary	This report summarizes Staff Labor Performance Detail.
Staff Report	For an in-depth list of your employees, choose this report.
Staff Training Report	This report shows your staff's certifications and other training and qualifications.

Supplier Reports

Report	Description
Supplier Listing by	The **Supplier Listing** filter helps you find suppliers of similar equipment, suppliers of a particular type, or suppliers in a specific location. You can isolate suppliers by last review, rating, receiving, or rejected material dates. Check *Include Product Data* to include equipment, tool, and part information for each supplier. Individual reports are made with the following groupings: 1. Equipment ID 2. Equipment ID with Equipment Data 3. Supplier Code 4. Supplier Code with Equipment Data 5. Supplier Name 6. Supplier Name with Equipment Data 7. Supplier Type 8. Supplier Type with Equipment Data

Tool Reports

Report	Description
Tool Bar Code Labels	Use this report to print bar code labels for tools. In the filter, you can select the label width (_", 1", or 1 _"). FaciliWorks determines the label length by the length of the bar code; it prints on the shortest label possible. To print bar codes, you must have the Maintenance Label Kit. For information on the Maintenance Label Kit, see *Appendix A: Maintenance Label Kit* on page 219.
Tool Issue History	This report shows tool issue and return information. The filter is designed so that you can prepare a report that displays the usage for one or more tools issued or returned on a particular day. To find records for a specific month or year, use wildcards in the date fields. For example, enter `10/*/2000` to find records from October of 2000. Enter `*/*/2000` to find all issue/return records for the year 2000.
Tool Listing	Using the *Summary* checkboxes, you can print three different reports: one detailed listing and two summaries. If you select the *Summary Listing By Equipment ID* option, and don't restrict the report to a single tool, it lists all associated task IDs and tools. If you filter for one or more tools, this report shows only equipment and task IDs that require the filtered tools. Tool Listing reports are also available sorted by: 1. Equipment ID 2. Tool

Variable Reports

Report	Description
Out of Limit Variables	This report lists variables that users tested and marked as beyond either minimum or maximum limits. Using the filter, you can search by work order completed or created date; equipment or task ID; variable and units; or reason for maintenance.

Report	Description
Variable History Report	Use this report to see the history of a particular variable or all variables. The filter window has the same options as the **Out of Limit Variables** report.
Variable Listing	Select this report to see a list of variables. You can filter by name or units, and search for variables marked *Allow Use If Fail* (see page 147).

Program Reports

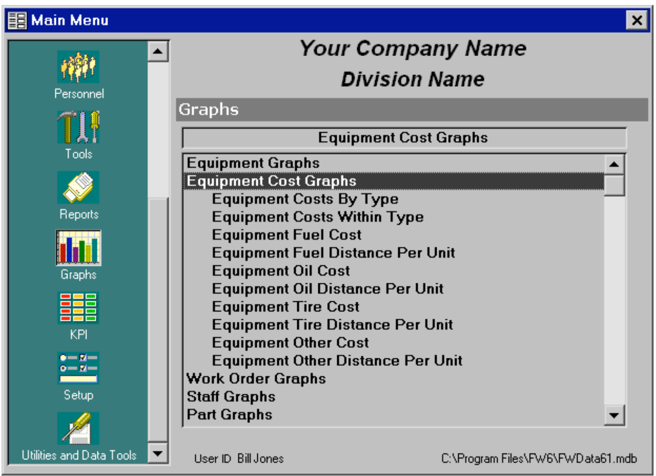
Report	Description
Audit Cards	This report prints out audit cards for the selected Equip ID, Task ID, or both. Before a technician performs maintenance, hide an audit card in the work area. The return of the audit card demonstrates that the technician was on-site and actually performed the work. If used randomly, audit cards can be effective follow-up tools.
Auto Log Detail Report	This report displays all information from the Audit Log. The Audit Log is used to keep track of any change that is made to the database. The Audit Log can be used to keep backup hardcopy records of this information or can be used to more easily scan for incorrect or falsified records.
Audit Trail Report	Prints an audit trail report showing date/time, user id, object and action taken. You can filter this report by dates, object, user, action and data key.
Blank Form	Use this feature to print blank data collection forms; select the desired form from the list. If you select the **Tool Issue and Return** form, you can choose a **Tool Issue, Return,** or combined **Issue/Return** form. The forms include: 1. Contract Entry 2. Equipment Entry 3. Part Entry 4. Procedure Entry 5. Purchase Entry 6. Service Request Entry 7. Staff Entry 8. Supplier Entry 9. Task Entry 10. Tool Entry 11. Tool Issue and Return 12. Tool Issue Sheet 13. Tool Return Sheet 14. Variable Entry 15. Work Order
Group Permissions and Users	This report is designed to print out the security permissions for all groups and users. This is used when first setting up security so the administrator can see exactly what forms and reports each user group has permissions too. It is also useful when modifying permissions or assigning users to other groups.
Checklist Listing	Use this feature to view and print checklists. You can filter by checklist name, words in the checklist text, inspection requirements, and/or whether signatures are required.

Report	Description
PM Sign-in Sheet	Attach the **PM Sign-In Sheet** to the equipment or post it nearby to log maintenance performed on the equipment.
Report Control Listing	For a comprehensive list of your report control IDs, including page alignment for each one, select this report. For more information about report control IDs, please see *Report Control Entry* on page 276 of the *System Administrator's Guide*.

Chapter 17: Graphs

FaciliWorks' graphs let you view information in several different formats. These features allow you to see comparisons and trends regarding equipment downtime; inventory value; maintenance hours required or expended; and estimated or expended costs. All of these graphs can be viewed onscreen, printed, or e-mailed.

To view graphs, go to the Main Menu and click on the **Graphs** icon on the left-hand side. A listing of graphs will appear.



Graph Filters

As with reports, each graph starts with a filter that allows you to define the group of records you want to analyze. These filters work in the same way as the report filters, allowing you to create specific representations of your maintenance costs and activities.

Graph Formats

Click on the buttons just below your graph to view it in any of these formats:

- **Bar**—horizontal bar graph
- **Column**—vertical bar graph
- **Line**—single line graph
- **3D Bar**—three-dimensional horizontal bar graph
- **3D Column**—three-dimensional vertical bar graph

Viewing, Printing, and E-mailing Graphs

Once you have selected the format you want for your graph, click on the **Print** button at the bottom of the window to print it without a print preview.

To see what your graph will look like when it is printed, click on the **View** button at the bottom of the window. A preview window will appear. You can use the window's scroll bars to see how your graph will appear, and zoom in and out. To print from this window, click on the printer icon. Your graph will be printed immediately. To send a graph as an e-mail attachment, click on the envelope icon. The **Send** dialog box will appear; it will prompt you to select a format for the graph. You must select **Snapshot**; the graph will not appear in your attachment if you select any other format. When you have done so, click **OK**; your e-mail client will launch and a new message will appear with your exported graph attached to it in Snapshot format.

Graph Settings

You can permanently save your graph settings if you have the **Save Report Settings** option enabled in **Settings—Options.** See **Settings—Options** on page 265 of the *System Administrator's Guide* for more information.

Graphs—Descriptions

This table describes each graph, including any special filtering options:

Equipment Graphs

Graph	Description
Equipment Downtime	This graph shows the downtime for a single piece of equipment and a corresponding task for the time period you specify. You can filter by dates of the creation or completion of the applicable work orders. Use this graph to determine whether the downtime for the same task for your equipment has increased or decreased during the time period you specified. If the filter finds two or more records that fit your filter criteria, you'll see individual graphs for each equipment ID and task matching the criteria.

Equipment Cost Graphs

Equipment Costs by Type	This graph shows cumulative costs. If you update your equipment records with current replacement costs, this graph will give you an accurate summary of original and replacement costs by equipment type.
Equipment Costs Within Type	This graph shows original and replacement costs for equipment, sorted by type.
Equipment Fuel Cost	This graph charts the fuel costs of your equipment over a period of time. You can filter for specific equipment only, or leave the filter blank to view costs for all equipment.
Equipment Fuel Distance per Unit	This graph charts the distance a piece of equipment travels per unit of fuel over a period of time.
Equipment Oil Cost	This graph charts the oil costs of your equipment over a period of time. You can filter for specific equipment only, or leave the filter blank to view costs for all equipment.
Equipment Oil Distance per Unit	This graph charts the distance a piece of equipment travels per unit of oil over a period of time
Equipment Tire Cost	This graph shows tire consumption over a period of time.
Equipment Tire Distance per Unit	This graph charts the distance a piece of equipment travels per tire over a period of time. If you want individual graphs for each tire, leave the *One Per Page* checkbox checked; if you want all tires for a given piece of equipment to be charted on the same graph, uncheck *One Per Page*.
Equipment other cost	This graph displays cost comparison for all other equipment related cost over a period of time.
Equipment Other Distance per Unit	This graph charts the distance a piece of equipment travels per unit of whatever you have entered under **Equipment Entry—Operating Costs—Other** over a period of time.

Work Order Graphs

Graph	Description
Work Order Cost	Use this graph to compare labor, contract, part, and total costs filtered by date, equipment, tasks, technician, or location. FaciliWorks creates a separate work order cost graph for every equipment ID and task ID that meet the selected criteria, so that you can easily compare them. You might want to generate the same set of graphs twice, once with only emergency work orders, and once with only non-emergency work orders, to compare the difference in cost.
Equipment Work Order Length	Use this graph to compare estimated and actual task time. FaciliWorks creates a separate graph for each equipment ID and task ID that fit your criteria.
Work Order Length by Tech.	Use this filter to find the total amount of time each technician spent on work orders during a specific time period. You can filter for a period of work order creation or completion. If you don't select an employee ID in the filter, you'll see a separate graph for every technician who performed a work order during the date range that you specified.
Work Order Schedule	For any time period you select, this graph shows all work orders that are due, whether they are scheduled, unscheduled, or service requests. Frequent viewing of this graph alerts you to excessive unscheduled maintenance or service requests.
Cost Center Total Downtime	This graph charts each cost center's total downtime. You can filter by date range, equipment ID, task ID, type, cause, equipment description, storage location, current location, technician, whether the downtime resulted from an emergency work order, and whether the downtime was scheduled or unscheduled.
Cost Center Average Downtime	This graph charts each cost center's average downtime. Filtering options are the same as above.
Cost Center Downtime Comparison	This graph compares each cost center's total downtime, average downtime, and total number of work orders. Filtering options are the same as above.
Equipment Type Total Downtime	This graph charts total downtime for each equipment type. You can filter by date range, equipment ID, task ID, type, cause, equipment description, storage location, current location, technician, whether the downtime resulted from an emergency work order, and whether the downtime was scheduled or unscheduled.
Equipment Type Average Downtime	This graph charts average downtime for each equipment type. Filtering options are the same as above.
Equipment Type Downtime Comparison	This graph compares total downtime for each equipment type, average downtime, and total number of work orders. Filtering options are the same as above.
Work Order Cause Total Downtime	This graph charts total downtime for each work order cause. You can filter by date range, equipment ID, task ID, type, cause, equipment description, storage location, current location, technician, whether the downtime resulted from an emergency work order, and whether the downtime was scheduled or unscheduled.
Work Order Cause Average Downtime	This graph charts average downtime for each work order cause. Filtering options are the same as above.
Work Order Cause Downtime Comparison	This graph compares total downtime for each work order cause, average downtime, and total number of work orders. Filtering options are the same as above.

Graph	Description
Technician Total Downtime	This graph charts total downtime for each technician. You can filter by date range, equipment ID, task ID, type, cause, equipment description, storage location, current location, technician, whether the downtime resulted from an emergency work order, and whether the downtime was scheduled or unscheduled.
Technician Average Downtime	This graph charts average downtime for each technician. Filtering options are the same as above.
Technician Downtime Comparison	This graph compares total downtime for each technician, average downtime, and total number of work orders. Filtering options are the same as above.
Work Order Scheduled vs. Unscheduled	This graph provides charts on both the number of scheduled vs. unscheduled work orders and the percentage of scheduled vs. unscheduled work orders for a given equipment ID. You can filter by date range on *Work Order Date Due.*

Staff Graphs

Graph	Description
Employee Performance	This graph helps you compare the amount of time that different employees spent on the same task during the same time period. You can also compare how much time the same task took for different pieces of equipment. Also use the graph to compare emergency work order time by equipment ID, task ID, or employee.
Craft Performance	This graph shows craft performance comparisons for a period of time.
Employee Performance Comparison	To compare employee performance, generate graphs for more than one employee for the same equipment ID, task ID, and time frame.

Part Graphs

Graph	Description
Inventory Value by Category	FaciliWorks arranges the inventory value of the filtered categories in descending order. Use wildcards in the filter to limit your comparisons or leave the filter blank to look at all categories.
Purchase Orders by Part	This graph shows information about the same part ordered from different suppliers. You can compare current and previous costs for the same part for different time periods to determine cyclical requirements, increased usage, or increased cost. Frequent use of this graph can alert you to excessive backorders that can affect your business. The filter lets you print one or more graphs showing the amount spent on each part during the time indicated (each part has a separate graph). You can limit the data by *Ordered By* or *Approved By* criteria or by supplier code, as well as including only parts that you've received.
Purchase Orders by Supplier	Use this graph to compare the costs of received and backordered parts for a particular period of time. You can compare parts purchased during the current and previous months or during the same month one year ago. You can choose to see only received parts, parts you haven't received, or both. FaciliWorks creates a separate graph for every supplier code.

Variable Graphs

Graph	Description
Variable History by Variable	**Variable History by Variable** tracks the history of a selected variable, using a single graph for all equipment and tasks. You can see trends and overall reliability, then decide if you need to make changes to improve reliability.
Variable History by Task	**Variable History by Task** tracks the history of a selected variable, showing a separate graph for each piece of equipment and each task. You can then see equipment trends and predict when readings will be out of tolerance.

Chapter 18: KPI

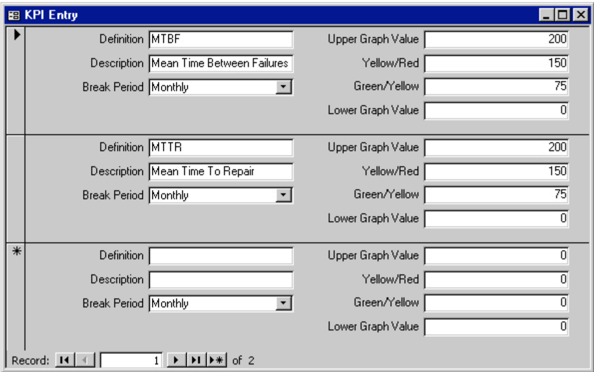
Key Performance Indicators (KPI) are measures which are monitored to know the situation in your company. They exist for different functions: financial KPIs, marketing KPIs, and, of course, maintenance KPIs.

Key Performance Indicators are derived from time-stamped FaciliWorks transaction data, such as labor and material costs, and are displayed in an easy-to-read graphic format.

Some KPIs are included with FaciliWorks, including MTBF and MTTR. In order to understand downtime, we use these two measures for maintainability and reliability. *Mean Time Between Failures* (MTBF) is the average time before failure of a system or device occurs. It is a measure of how reliable a product is. MTBF is usually given in units of hours; the higher the MTBF, the more reliable the product is. *Mean Time To Repair* (MTTR) is the total corrective maintenance time divided by the total number of corrective maintenance actions during a given time period.

KPI Entry

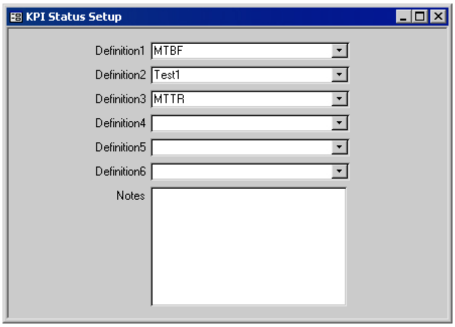
This screen lets you enter KPI information such as a definition and description of the KPI.



Field	Description
Definition	Enter a definition or abbreviation of a KPI Entry
Description	Enter a brief description of the definition or abbreviation
Break Period	This field controls the time period used to calculate this KPI. You may choose the following periods: **Annually:** The program uses the past 12 months for the KPI **Semi-Annually:** The program uses the past 6 months for the KPI **Quarterly:** The program uses the past 3 months for the KPI **Monthly:** The program uses the past month for the KPI **Weekly:** The program uses the past week for the KPI **Daily:** The program uses the current date for the KPI **Never:** The program uses all data for the KPI regardless of date.
Upper and Lower Graph Value	The upper and lower graph values are those that respectively appear at the top and bottom of the graph. When larger KPI numbers are undesirable, the Upper Graph value should be set at the maximum value and the Lower Graph value should be set at the minimum. When smaller KPI numbers are undesirable, the Upper Graph value should be set at the minimum value and the Lower Graph value should be set at the maximum.
Yellow/Red and Green/Yellow	Enter here Green/Yellow and Yellow/Red values. These values will be used to compute for the calculated value to be used in generating the graph. The Yellow/Red value must be between the Upper Graph Value and the Green/Yellow value. The Green/Yellow value must be between the Yellow/Red value and the Lower Graph Value.

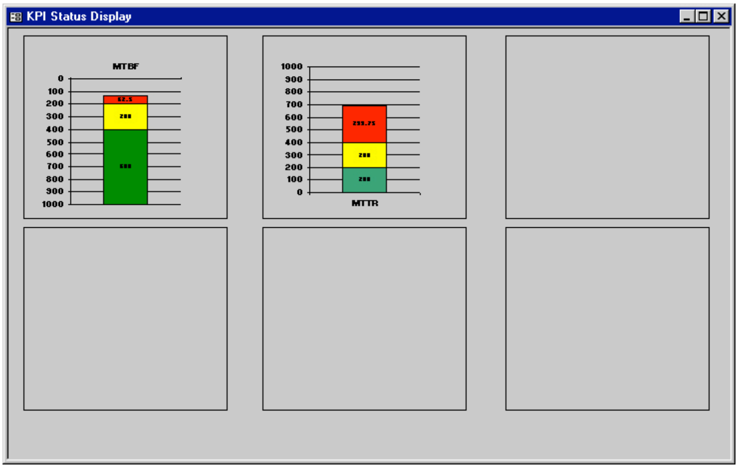
KPI Status

This screen lets you determine which graphs you want to show when you select KPI display. You can have many KPI entries, but only 6 graphs can be displayed at a time.



KPI Display

This screen displays the graphs you have selected in the status setup. The KPI will be graphed with a bar starting at the Lower Graph Value. If the KPI value is between the Lower Graph Value and the Green/Yellow value, then the entire bar will be green. If the KPI is between the Yellow/Red and the Green/Yellow, then the bar will be green up to the Green/Yellow value and then yellow to the KPI value. If the KPI value is between the Upper Graph Value and the Yellow/Red value, then the graph will be green to the Green/Yellow value, yellow to Yellow/Red value and then red to the KPI value.



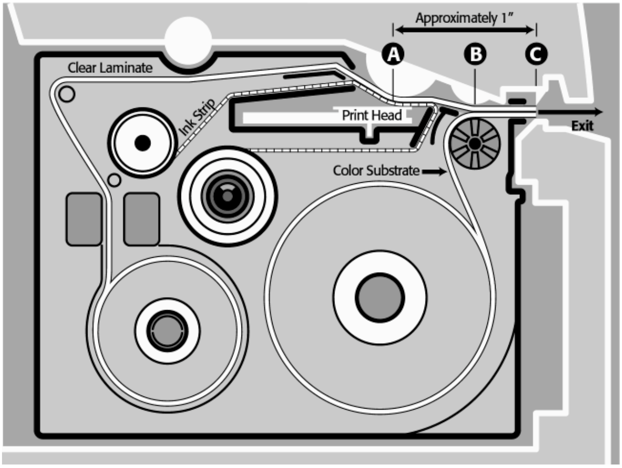
Appendix A: Maintenance Label Kit

With the FaciliWorks Maintenance Label Kit, you can print durable, oil-resistant, adhesive backed labels to use to identify parts, equipment, tools, and maintenance. The kit includes a dedicated Brother label printer, cables, a 1/2 inch black on white tape cartridge, and software drivers for both Windows and Macintosh computers. If you ordered additional tape cartridges, they will be enclosed with your kit.

Installing the Label Printer & Windows Software

Attach the power cable and the serial *or* USB cable, insert the label cartridge into the printer and then install the **P-Touch Editor** from the enclosed Brother CD (see the accompanying Brother booklets for detailed instructions).

Note: The P-Touch Label Printer ejects and cuts off a strip of blank label material approximately 1" long before printing. This is a direct result of the design of these label printers. The diagram below illustrates the mechanics of the P-Touch printer.



At point A in the diagram, the print head transfers ink from the ink strip to the back of the clear laminate. Rollers bond the color substrate and the clear laminate together at point B. The laminated tape is then fed out until it reaches the cutter at point C. The cutter is approximately one inch beyond the print head along the path of the tape; therefore, at the beginning of the printing process, about one inch of blank tape has already advanced past the print head. This problem cannot be eliminated; however, it can be mitigated by printing labels in batches rather than individually, since the printer will feed a blank strip only at the beginning of each batch of labels.

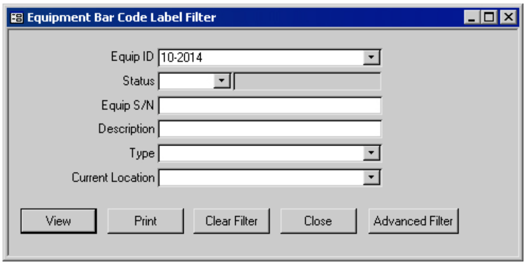
To preview a label on-screen, check the **Preview** box, then click any of the label buttons.

Printing Bar Code Labels

You can print bar-code labels for your equipment, parts, and tools directly from FaciliWorks. The length of the bar code determines the length of the label; FaciliWorks will print each label on the shortest label possible.

Printing Equipment Bar Code Labels

To print bar-coded equipment labels, go to the **Reports** menu, select **Equipment Reports**, then select **Equipment Barcode Label 1_ Inch, Equipment Barcode Label 1 Inch,** or **Equipment Barcode Label _ Inch**. You'll see a filter window like this one:



Use the filter to select a specific piece or group of equipment. Next, click **View** to see a **Print Preview** version of your label(s) or click **Print** to print them. Click **Clear Filter** to remove any filter information; click **Close** when you're finished.

Printing Part Bar Code Labels

To print bar-coded part labels, go to the **Reports** menu, select **Part Reports**, then select **Part Barcode Label 1_ Inch, Part Barcode Label 1 Inch,** or **Part Barcode Label _ Inch**. The label filter window is similar to the **Equipment Barcode Labels** filter. Select parts by part number, model number, category, and supplier. After you've selected the part(s), view and print your labels according to the instructions above.

Printing Tool Bar Code Labels

To print bar-coded tool labels, go to the **Reports** menu, select **Tool Reports**, then select **Tool Barcode Label 1_ Inch, Tool Barcode Label 1 Inch,** or **Tool Barcode Label _ Inch**. You'll see a filter window similar to the filters for equipment and part labels. Select a specific tool or group of tools by tool ID, serial number, manufacturer, type, and size. After you select the tool(s), view and print your labels according to the instructions above.

Designing Your Own Labels

FaciliWorks Custom Reports

You can design and save your own labels in FaciliWorks, using the **Report Editor** utility. To do this, go to FaciliWorks' Main Menu and click on the **Setup** icon on the left-hand side of the screen. Click on the **Custom Reports** button; in the **Custom Reports** screen that appears you can select a label to use as a template, or click on **Create New Reports** to select a label template or design a label from scratch using the label wizard.

For a detailed explanation on creating custom labels and reports, see *Chapter 10: Customizing Reports,* beginning on page 325 of the *System Administrator's Guide.*

Other Labels

The Maintenance Label Kit also includes special label designing software provided by Brother. To run it, click your Windows **Start** button, select the **P-Touch Editor 3** program group, then select **P-Touch Editor 3**. With the label design software, you can create any type of label that you need, including:

Maintenance Instructions	Test Tubes and Apparatus	File Cabinet Labeling
Operating Instructions	Dangerous Materials Notice	Folder Labels
Sample Submissions	Warning Notices	Parts Bins
SPC Capability Studies	Floppy Disks	Asset ID Labels
Receiving Inspection Tags	Inventory	Employee Badge Labels
Inspection Hold Tags	Storage Bins	Computer Cabling
		. . . and more!

Labels designed with **P-Touch Editor 3** cannot be printed through FaciliWorks; you must print them through **P-Touch Editor 3.** For information and instruction on how to use **P-Touch Editor 3,** please consult the documentation provided by Brother that came with your printer.

FaciliWorks 7

Maintenance Management Software

Version 7.0

System Administrator's Guide

Chapter 1: Introduction and Implementation Planning

Introduction

Welcome to FaciliWorks Maintenance Manager for Windows, a computerized maintenance management software (CMMS) program that gives you an easy-to-use, flexible system for scheduling, managing, and tracking your maintenance tasks. This *System Administrator's Guide* is intended to be used by supervisors and network administrators who will be responsible for leading the implementation of FaciliWorks. It contains installation instructions for both single-user and client/server setups. You'll also learn how to set up users, security, and user-defined program settings, then perform advanced system maintenance features, including backing up and restoring data and importing data from other CMMS programs. For more information about entering records into FaciliWorks, please consult the *User's Manual.*

FaciliWorks Implementation Planning

As with any new record control system, be it computerized or manual, it is worthwhile to take the time and plan the implementation. Listed below are some major steps to consider.

1. Define your needs for the system.
2. Define when you want to start using FaciliWorks; set both long- and short-term goals.
3. Define who will be responsible for the system.

Define Your Needs

The first step is to define what your needs are for your maintenance system and then determine how FaciliWorks can help you meet those needs. For example, you may need the system to:

- Maintain an inventory of all equipment, tasks, tools, and parts
- Remind you when PM tasks are due
- Maintain a complete history of all equipment and repair records
- Maintain a history record for each tool usage
- Maintain a database of your maintenance procedures
- Maintain a database of your equipment suppliers and service providers

Define When You Want to Start Using FaciliWorks

Take the needs that you defined in step one and divide them into short- and long-term needs (goals). Next, decide when you want your short-term goals to be accomplished and begin working toward them. This will help you make FaciliWorks useful in the shortest possible time.

Short-Term Needs

Short-term needs might include:

- Entering records for only "active" equipment (items that are used currently or may be used in the near future)
- Entering only the most recent history of maintenance records
- Setting up an internal equipment identification numbering scheme (if you don't currently use one)

Before you begin entering your equipment records, you should organize your data and formulate a plan for consistent data entry. You may wish to categorize all of your equipment by type so that you can later quickly generate reports by type. You can also generate reports by equipment description, so you may want to enter some common information for each kind of equipment. Or you may find it useful to devise an equipment identification scheme that includes the type of equipment. For example, all equipment IDs that begin with a "V" indicate vehicles, "T" for trucks, "HVAC" for facilities, "P" for packaging, or "1" for Plant 1.

Your equipment ID might also include the area where the equipment is used, the cost center it belongs to, the department responsible for it, or any other useful information that would help you instantly identify it.

Next, begin working to satisfy your long-term needs.

Long-Term Needs

Long-term needs might include:

- Entering your compete inventory of equipment (active, inactive, and perhaps employee-owned items)
- Entering the complete history of maintenance records (perhaps going as far back as five years)
- Setting up maintenance procedures for on-line reference and control
- Reviewing maintenance history and optimizing frequencies or scheduling method (i.e., calendar- versus meter-based schedules)
- Entering information about your equipment and service suppliers

Define Who Will Be Responsible for the System

To define who will be your system administrator (the person or group of people responsible for the system), answer these questions:

- Who should have responsibility for the system?
- Who will install the program?
- Who will enter the records?
- Who will maintain and back up the data files?
- Who will take the inventory?

Once you answer these questions, you can decide who should lead your FaciliWorks implementation.

Gathering Records and Preparation

To begin entering your equipment inventory into FaciliWorks, you'll need to either collect your existing records (such as paper files, cards, and printouts) or create new records from scratch. If you're switching from another computer-based maintenance system, you may be able to import your records into FaciliWorks. FaciliWorks can import records from most PC-based spreadsheets (such as Lotus 1-2-3 or Microsoft Excel), as well as from ASCII files (comma delimited). See page 305 for more information on importing data into FaciliWorks.

If your records are in a system that uses a proprietary file format, you may still be able to import your records by "printing" a report to a file or writing a software program to extract the records. If needed, CyberMetrics can assist you with the import and record conversion process (for an hourly fee).

If you are unable to import records from another computer system and must manually enter your records from paper-based records, you can take this opportunity to carefully

review your records for completeness and correctness. Questions that you need to answer include:

- Where is the existing information?
- How accurate is the data?
- Are walk downs necessary to collect equipment information?
- Should walk downs cover all equipment or only equipment that lacks complete, accurate information?
- Is the equipment still located where it was when the original records were created?

Instruct the data collecting person or team on exactly what data to collect and enter. This eliminates the need to look at the same equipment and files more than once.

You can print blank data collection sheets from FaciliWorks. Use these sheets to collect equipment information as you go through your facility. You'll then have the information organized and accessible so that you can quickly enter it into FaciliWorks.

To print blank forms, go to the **Reports** menu, select **Program Reports**, then choose **Blank Form—** and the form you want to print.

What to Include in FaciliWorks

Before you actually enter data into FaciliWorks, you must develop a data-building strategy. FaciliWorks allows the equipment record to represent whatever you want it to designate. This means that in FaciliWorks, a piece of equipment, a vehicle, a facility, a building, or a pump can all be considered a piece of equipment. For example, the record for a pump could be for the entire pump and all its constituent and related components, or you could have a record for the pump alone and separate records for the motor, starter, and other components.

To decide what to include, answer the following questions:

- Does each component need a separate history?
- Do we need a separate part list for each component?
- Are the components critical or expensive?

If you answer "yes" to any of these questions, you'll want to enter the pump and its components as separate equipment records.

Maintenance Tasks

Your data-building strategy should also include how you are going to handle maintenance tasks. For example, should you create stand-alone or cumulative tasks for multiple frequencies, such as semiannual and annual tasks? Does the annual task include the maintenance procedures of the semiannual, or should you create both orders when they coincide once a year?

Other Considerations

If you're going to manually enter your equipment records, you should examine the order in which you process them. By using FaciliWorks' **Clone** function, you can save considerable time and avoid mistakes.

In a typical manufacturing environment, many pieces of equipment are used. Although many individual pieces of equipment may be used, there may only be a few different *types* of equipment. The only differences between similar pieces of equipment will be each one's ID number, serial number, and location. They might also share the same maintenance tasks and procedures. If this is the case for your company, you can set up a *boilerplate* record of each equipment type and then clone the boilerplate record when you add a new piece of equipment of the same type.

If you are responsible for centrally managing the records of several facilities (which may amount to thousands of equipment records), then you might want to use multiple databases (to avoid waiting too long for records to process and for reports to generate).

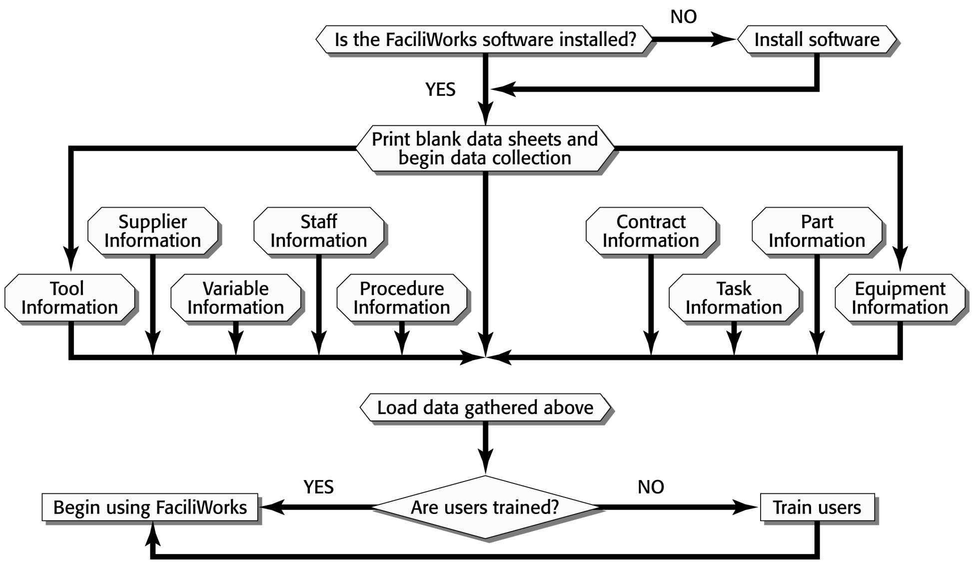
Training

Each FaciliWorks user should have a thorough understanding of the particular functions that he or she will use. It's not necessary for a user to learn FaciliWorks' tools and utilities if that user isn't going to have administrator rights. For this reason, instructions for these tools and utilities are included only in this guide. Keep in mind that some users may need training on basic computer and Windows functions.

For more information about FaciliWorks training classes, please see *Appendix C: Training* on page 365.

Steps for Implementing FaciliWorks

As you implement your new software, use this flowchart as a guide.



Chapter 2: Installation

You can use FaciliWorks 7 on a single workstation, on a network, or in a client/server environment – installation will vary slightly for each of these options. This chapter gives you general installation instructions for all options. Chapters 3 and 4 deal specifically with installing MSDE and an MS SQL client/server system, respectively.

FaciliWorks 7 for Windows requires the following:

WorkStation Requirements

- Microsoft Windows 98, 2000 or XP
- Hard disk with 200 MB of free space for program files, plus 100 MB for a typical database.
- 512 MB or higher RAM
- Pentium 1.4 CPU required; Pentium 2.4GHz or current technology recommended
- SVGA monitor at 800 x 600 resolution or higher
- Microsoft Internet Explorer Version 6.x
- Mouse or compatible pointing device
- Default Windows printer for printing reports

Network Requirements

Optional: This section will only apply if the data file will be shared over the network or will be part of a regular network backup

- Network folder with full rights for each program user
- 100 MB LAN

Installation

Files

The setup consists of three files: SETUP.EXE contains all the files required to run FaciliWorks; F_CONECT.INI is the initialization file used during installation to configure the user's database settings; and README.TXT notes special features or changes to the program.

Installation Options

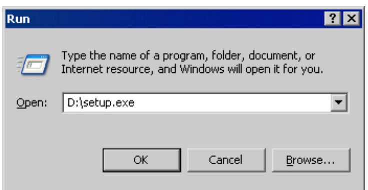
You can use FaciliWorks 7 as a client/server program, with one centralized, dedicated computer hosting the database and one or more user workstations accessing the database from that server. You can also choose to install and use FaciliWorks on only one PC (a single-user setup).

If you have a multi-user license of FaciliWorks, you and your other FaciliWorks users can install the program from the CD or from a network location. If you want your users to install from a network location, copy the SETUP.EXE and F_CONECT.INI files to the same network location, then instruct users to run SETUP.EXE from that location. You can find the Access, MSDE, or MS SQL F_CONECT.INI file on the CD under the directory of the database name (i.e., the Access F_CONECT.INI file is in the Access directory on the CD).

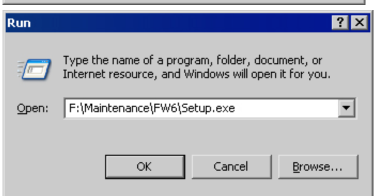
To install FaciliWorks, follow these instructions:

1. To begin installation, click the Windows **Start** button and select the **Run . . .** command. Click the **Browse** button to navigate to your CD-ROM or network drive, then select `SETUP.EXE`.

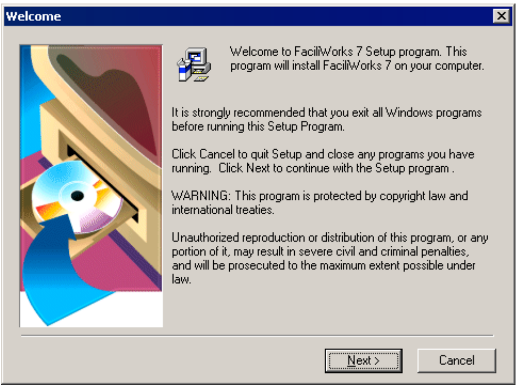
   The sample screens show a CD and a network installation.



or

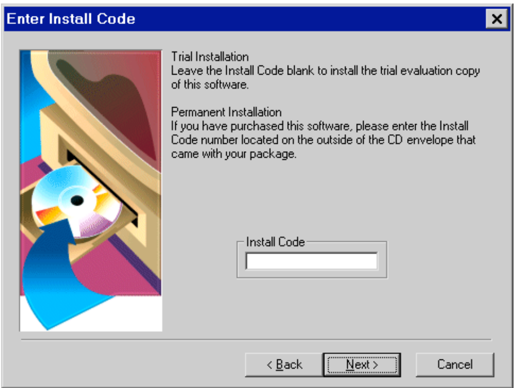


2. Next, you'll see the **Welcome** screen. Make sure that you've closed all other programs, then click **Next**.

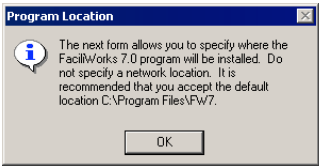


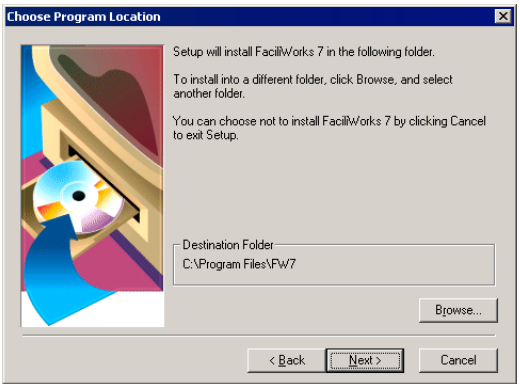
In the next screen, enter the install code for your copy of FaciliWorks. You can find this code on your software package.

Tip: If you don't have an install code, leave this field blank.



3. Now the installer will prompt you to choose the location for the program on your hard drive. Since this location is specific to each workstation, do not select a network location. We recommend using the default directory—C:\PROGRAM FILES\FW7.

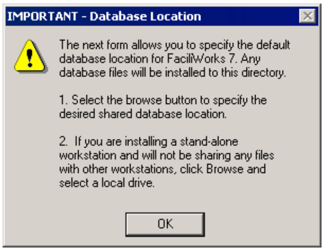


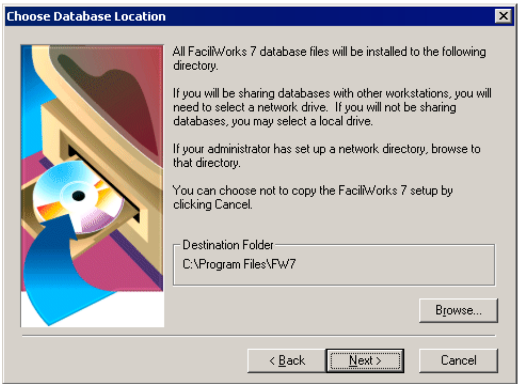


4. Unless you're using the program with an MS SQL database, the installation program will now let you select a location for the FaciliWorks database. If you are using FaciliWorks in a client/server environment, skip to step 5.

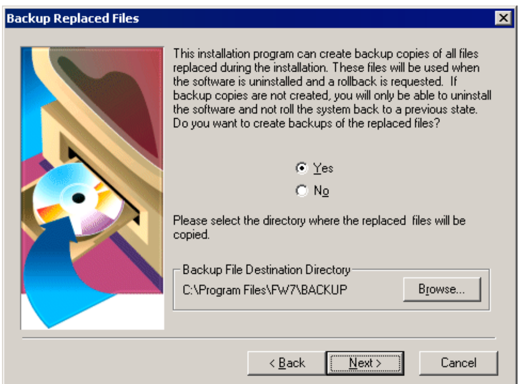
If you are using the program on a single workstation, select the default directory – C:\PROGRAM FILES\FW7. If you have a network license of the program and are using it with an Access database, click the **Browse** button and select the network directory where you will store your database. If you are running the setup from a network drive, the path to the SETUP.EXE file will be the default database location.

Note: If your Windows Registry or INI file already lists a directory for the FaciliWorks database file, that directory information will appear in this screen. Go to step 5.

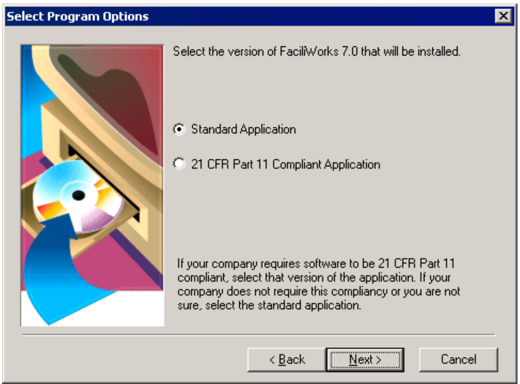




5. Next, FaciliWorks will ask if you want it to create backup copies of all of the files that it overwrites on your system. We recommend that you select **Yes** and use the default location (C:\PROGRAM FILES\FW7\BACKUP).



6. Next, FaciliWorks will ask you if you want to install the standard application or the 21 CFR Part 11 application.



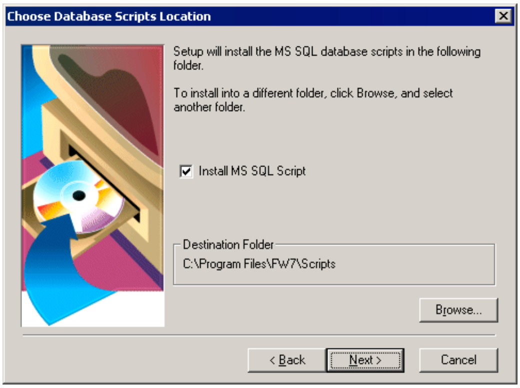
If your company is required to be compliant with 21 CFR Part 11, then you must install the 21 CFR Part 11 version of FaciliWorks. If your company is not required to comply with 21 CFR Part 11, then you can pick the Standard Application. If you are not sure if you are required to comply or not, select the standard version of the program.

Both versions are identical except that the compliant version requires security to be active at all times.

If you are installing the compliant FaciliWorks and do not have a database set up or if your existing database does not have any security set up, FaciliWorks will create a secure user. The name of this secure user is "Default" and there is no password. When you run the program, you will be presented with a login form. Enter the user name of `Default` and you will be prompted to enter a password and confirm that password. Once you have done this, you will then be able to set up users and groups in the security form. For more information, see the section **Security**, beginning on page 283 of the *System Administrator's Guide.* After setting up other users, delete the Default user. If your database already has security set up, FaciliWorks will not add a user. In this case, simply log in as you have done in other versions of FaciliWorks.

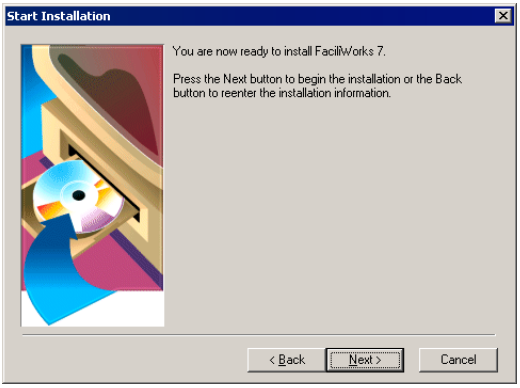
If you are installing the standard FaciliWorks, security is not required and no users will be created. You may set up security if you wish. For more information, see the section **Security**, beginning on page 283 of the *System Administrator's Guide.*

7. If you're using an SQL version of FaciliWorks, the installation program now asks where you want to install the database scripts. Click the **Browse** button to select a location. If you don't want to install the scripts, remove the check from the **Install (MS SQL) Scripts** box.

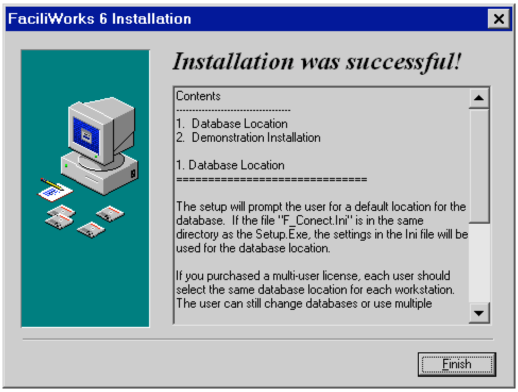


8. Now the program will ask you to select the **Program Manager** group to add FaciliWorks' icons to. We recommend that you select the default—`FaciliWorks 7`.

9. Click **Next**, and this screen will appear:



10. Click **Next** to begin the installation. When it's finished, you'll see this screen:



11. Click **Finish**. If additional files are required for FaciliWorks 7 to run, they will install now. Follow the instructions on your screen to install any additional files.

Important Note: During user workstation installations from your network, FaciliWorks will look for the appropriate program settings in the configuration file (F_CONECT.INI) in the network directory. If it doesn't find them there, it will check the workstation's Windows Registry and use the settings there. If the settings aren't in either of these locations, the program will use the default information (MS Access).

Please note that Technical Support is not available for the creation of your client/server database.

After You Install FaciliWorks

If you're upgrading from a previous version, you will need to run the **Data Transfer Utility** before you begin using the program. Please see *Appendix A: Data Transfer Utility* for complete instructions.

If you're using FaciliWorks in a client/server environment, first follow these steps to configure it with your MS SQL database:

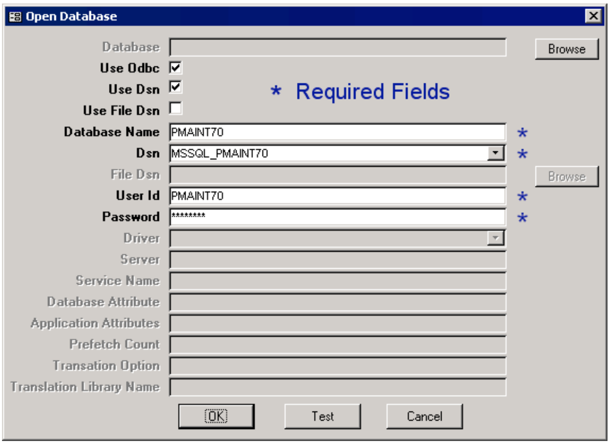
Administrator Installation

To complete the administrator setup, follow these steps:

Note: You will need to do this only once for an administrator setup. To set up each workstation, follow steps 3-10.

1. Open the Data Transfer Utility and run the appropriate scripts for your server to create the database and tables. The scripts are located in the PROGRAM FILES\FW6\SCRIPTS directory. The files have prefixes to their names (Step1, Step2...) to indicate the order in which you should run them. You might need to modify the data file in the table space for your system. See the Step 1 script for details.
2. Next, run FaciliWorks' **Data Transfer Utility** to import existing data from a previous version or prefill the database. See *Appendix A: Data Transfer Utility* for instructions.
3. Open FaciliWorks 7 and select **Open Database** from the **File** menu.
4. In the **Open Database** screen, check the **Use ODBC** checkbox.
5. Place a check in the **Use DSN** checkbox.
6. **Important:** If you used a different *Database Name*, *DSN*, *User ID*, and/or *Password* during installation, enter the information you used instead of the values listed below. If you set up the configuration file (G_CONNECT.INI), FaciliWorks will automatically fill in these fields in this screen.
7. The **Database Name** should read `Pmaint70` (or the name that you entered during installation).
8. The **DSN** field should show `MSSQL_Pmaint70` (the DSN that you entered during installation; this value may be different).
9. Your user ID should be `Pmaint61` (this field may also vary according to your setup).
10. The **Password** field should contain the password you entered during installation. Note that the password is displayed as asterisks for security purposes.

11. Your screen should look similar the one below. When you're finished, click **OK**.



Configuration File Settings

If you want to reconfigure your F_CONECT.INI file, follow these guidelines:

> **Note: The brackets (←x→) contain instructions about the information you should enter after the equal sign (=) on each line.**

[Database]
dbType=←0 *for a Microsoft Access Database,* 1 *for a client/server database*→
UseDSN=←0 *for No,* 1 *for Yes (used only for client/server)*→
UseFileDSN=←0 *for No,* 1 *for Yes (used only for client/server)*→
File=←*Name of the database file (used for Microsoft Access Database)*→
Path=←*Path (mapped drive or UNC) to the database file (used for Microsoft Access Database)*→
DSN=←*Data Source Name for the database (used for DSN)*→
FileDSN=←*Name and path (mapped drive or UNC) of the DSN file (used with FileDSN)*→
Driver=←*Driver name (only if not using FileDSN or DSN)*→
Server=←*Name of the server (used for Microsoft SQL Sever)*→
Database=←*Name of the database (used for client/server)*→
UID=←*User ID (used only for client/server)*→
PWD=←*Password (used only for client/server)*→
APA=←*Application Attributes (used only for client/server) (not required)*→
DBA=←*Database Attribute (used only for client/server) (not required)*→
DBQ=←*Service Name (required for Oracle if not using DSN or FileDSN)*→
PFC=←*Prefetch Count (used only for client/server) (not required)*→

TLL=←*Translation Library Name (used only for client/server) (not required)*→
TLO=←*Translation Option (used only for client/server) (not required)*→

[Install]
InstallCode=←*Installation Code – found on software package and CD envelope*→

Sample Configuration

The following sample is for a single-user, Access database version of FaciliWorks 7.
[Database]
dbType=*0*
UseDSN=
UseFileDSN=
File=*FWDATA70.MDB*
Path=*C:\PROGRAM FILES\FW7*
DSN=
FileDSN=
Driver=
Server=
Database=
UID=
PWD=
APA=
DBA=
DBQ=
PFC=
TLL=
TLO=

[Install]
InstallCode=←*Installation Code – found on software package and CD envelope*→

Chapter 3: MSDE Installation

The Microsoft Data Engine or MSDE is an SQL Server-compatible data engine which allows you to transfer solutions created in MSDE to SQL Server 7.0 without altering your codes. It can be installed on a client machine running on WIN 2K Pro, WIN XP, or even WIN 98.

> **Note: This chapter gives you step-by-step instructions for installing and configuring your database. When you're finished, please return to chapter 2 for instructions on installing and setting up FaciliWorks. Also, remember to modify all references to drives, paths, user ID, password, server names, etc. to fit your system.**

Minimum requirements for MSDE 2000

Processor

- Intel Pentium or compatible 1.4 GHz or higher processor

Operating System

MSDE 2000 is compatible with any of the following Microsoft Windows operating systems:

- Windows Server 2003, Standard Edition*
- Windows Server 2003, Enterprise Edition*
- Windows Server 2003, Datacenter Edition*
- Windows Server 2003, Web Edition*
- Windows 2000 Server

- Windows 2000 Advanced Server
- Windows 2000 Datacenter Server
- Windows XP Professional
- Windows 2000 Professional
- Windows 98 SE

*** Windows Server 2003 requires SQL Server 2000 Service Pack 3 or later to be applied.**

Memory

- Windows XP: 256 megabytes (MB) of RAM; 512 MB recommended
- Windows 2000: 256 MB of RAM; 512 MB recommended
- All other operating systems: 256 MB RAM required; 512 MB recommended

Hard Disk

- 50 MB of available hard disk space (This is just for MSDE)

Setting MSDE 2000 for FaciliWorks 7

Before installing MSDE, make sure you save your work and close all applications as the installation process will require you to restart your computer. To install:

1. To begin installation, click the Windows Start button and select the Run . . . command.
2. Click the Browse button to navigate to your CD-ROM or network drive, then select SETUP.EXE.
3. Install MSDE.

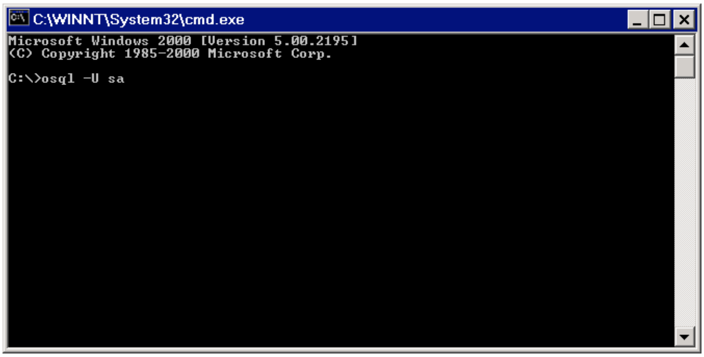
Once installed, the SQL Server Service Manager icon will appear in your taskbar.

However, the default Authentication mode of the installation is *Windows Authentication only*. You need to change this to *mixed mode*. While MSDE 2000 provides the interface that allows the user to configure the authentication code, as compared with MS SQL, the data engine requires that you manually change this in the registry.

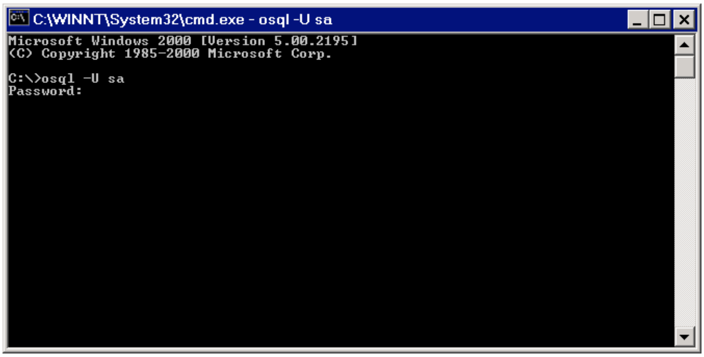
To check current Authentication Mode for MSDE 2000

1. Open the Command Prompt window by clicking the Windows Start button | Run and typing in cmd in the blank field. Press Enter.

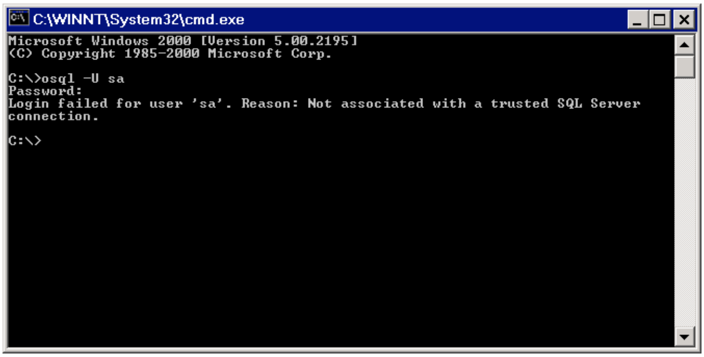
2. At the command prompt, type in: osql –U sa and press Enter.



3. The screen below will appear:



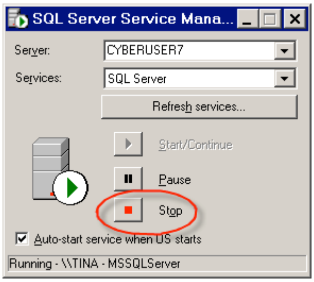
4. Press Enter again. This will pass a blank password for sa.



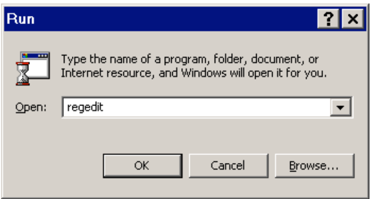
The message in the screen above indicates that the computer that is running SQL Server \MSDE 2000 is set to *Windows Authentication* only.

To modify current Authentication Mode for MSDE 2000

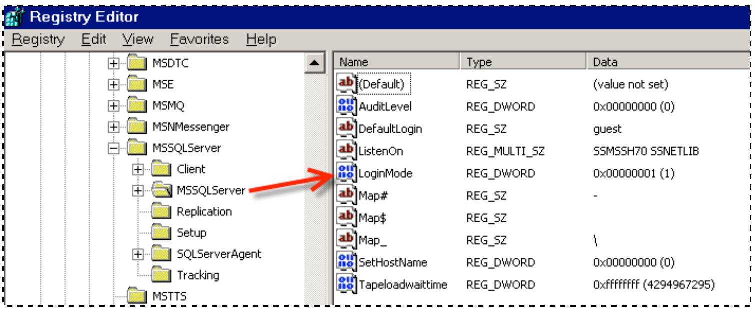
1. Double click on the SQL Server Manager icon on your task bar.
2. Click on the Stop button to halt the SQL server and all other related services.



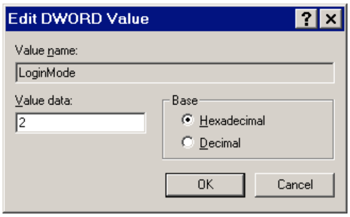
3. Access the Registry Editor by clicking on the Windows Start button | Run and typing in regedit in the blank field. Click OK.



4. Locate the subkey HKEY_LOCAL_MACHINE\Software\Microsoft\MSSqlserver\MSSqlServer
5. In the right pane, double-click the LogInMode subkey.



6. In the DWORD Editor dialogue box, set the value of this subkey to 2. Make sure that the Hexadecimal option is selected, then click OK.

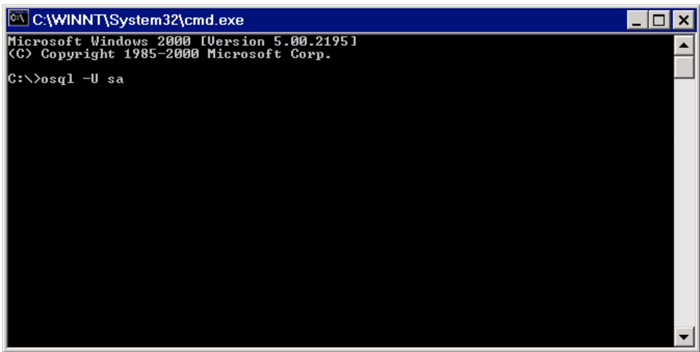


7. Note: 1 indicates Windows Authentication mode while 2 is Mixed Mode.
8. Restart the MS SQL Server and the SQL Server Agent Services for the changes to take effect.
9. Authentication mode is successfully changed to mixed mode.

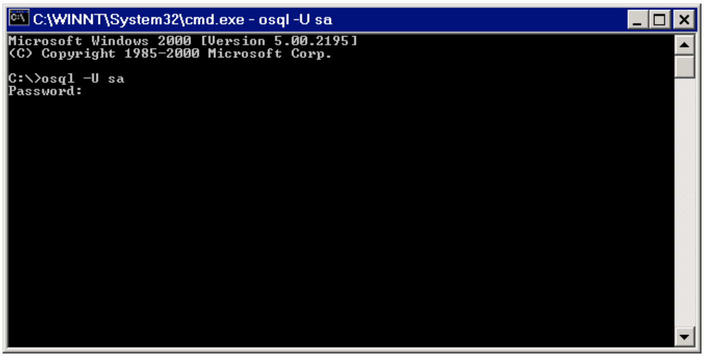
Note: The default sa password is blank (null). For security reasons, however, you might want to change the sa password.

Changing the SQL administrator password through the Command window

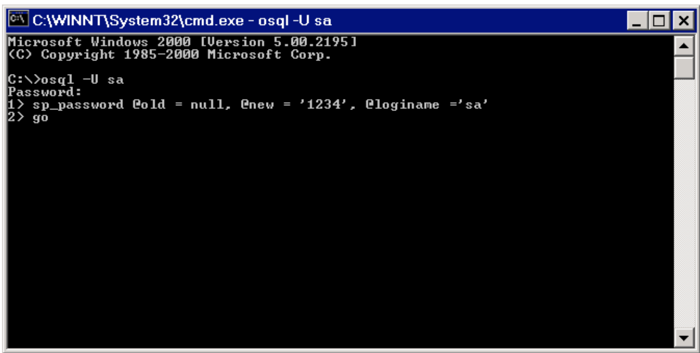
1. Open the command prompt window.
2. Type the command `osql –U sa` and press **Enter.**



3. At the password prompt, press **Enter**.

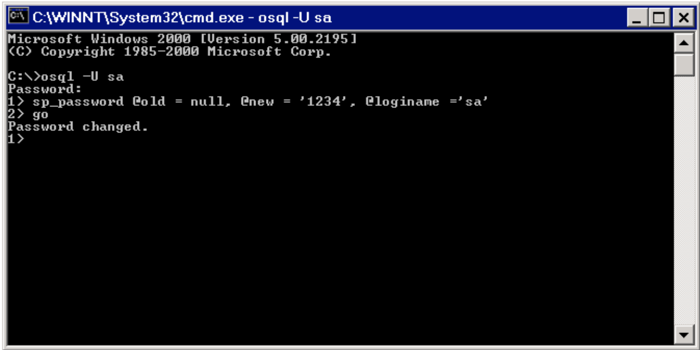


4. Type in the following commands as shown in the accompanying screenshot:
sp_password @old = null, @new = '1234', @loginame ='sa'
go



Note: 1234 is your new password. This, however, is merely an example as you can replace 1234 with your own password. This string accepts up to 128 alphanumeric characters.

5. The message **Password changed** will appear once the task has been successfully completed.



Once you are finished with section, you are now ready to continue your installation of FaciliWorks. MSDE 2000 does not include the Enterprise Manager which will allow you to view and manage your databases. Enterprise Manager comes with the full MS SQL.

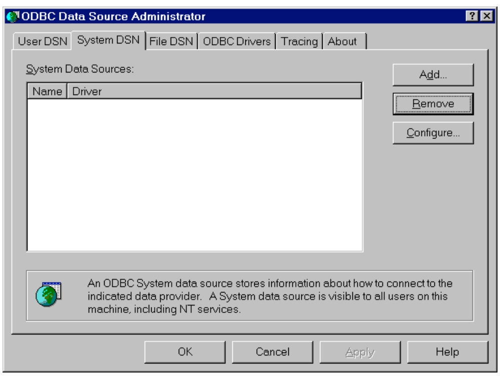
Chapter 4: MS SQL Installation

If you're going to use FaciliWorks on a MS SQL client/server system, first install FaciliWorks (see chapter 2 for instructions), then create the data source name (DSN) for your setup, following the instructions in this chapter.

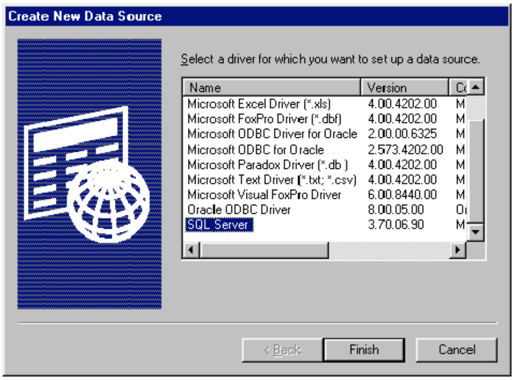
Create Data Source Name (DSN) for MS SQL

If you're using FaciliWorks with an MS SQL server, follow these steps to create your DSN.

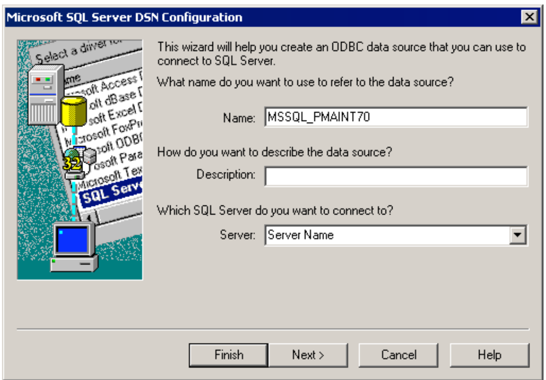
1. Click **Start**, then select **Settings | Control Panel**. Double-click the **ODBC** icon, and the **ODBC Data Source Administrator** window will appear.
2. Go to the **System DSN** tab.



3. Click the **Add** button. You'll see a screen similar to this one:

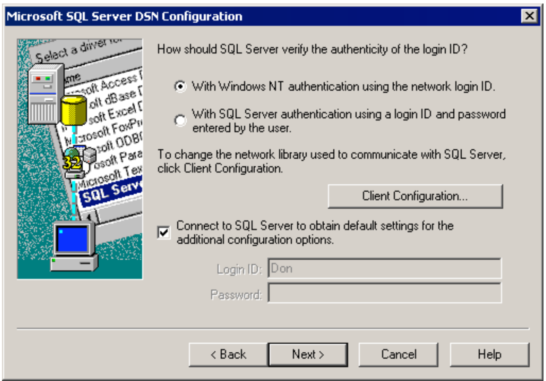


4. Select the `SQL Server ODBC driver` and click **Finish**. This screen will appear:

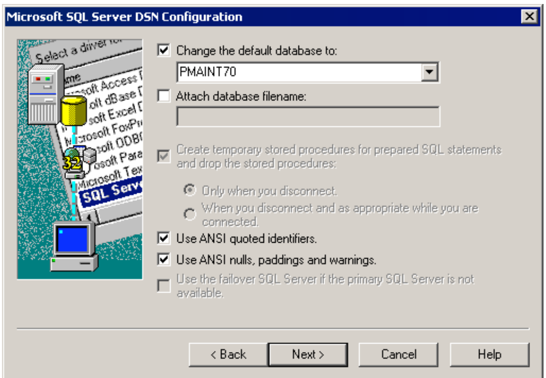


5. Enter `MSSQL_PMAINT70` for the data source **Name**.
6. In the **Description** field, enter a brief explanation about the data source.

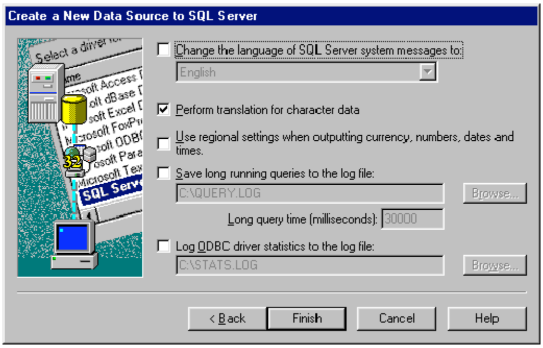
7. After you enter the name of the MS SQL server, click **Next**. This screen will appear:



8. Enter the **Login ID** and **Password** for your SQL server, then click **Next**.
9. You'll see the **Configuration** screen. If needed, change the default database (check the box next to this field and enter or select a new database).



10. Now, click the **Next** button. You should see a screen similar to this one:



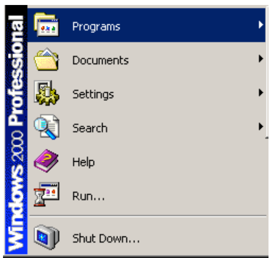
11. Click **Finish**. The **SQL Server Setup** screen will appear.
12. To check the data source, click **Test Data Source**. If you don't want to test it, click **OK**.
13. When you're finished, close the **ODBC Data Source Administrator**.

Chapter 5: Running FaciliWorks

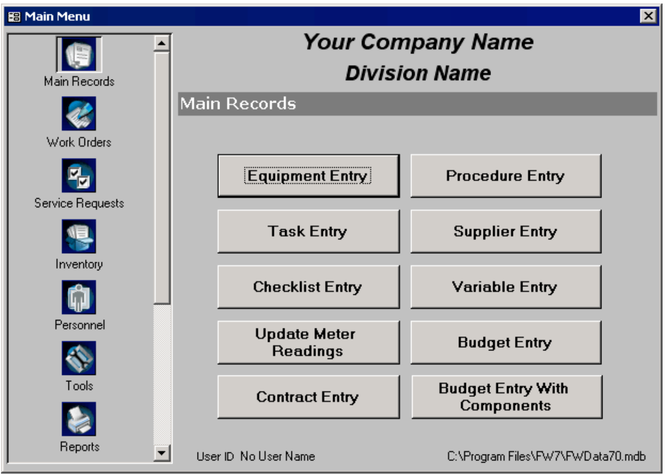
To start using the application:

1. Click the **Start** button.

2. Select **Programs**.

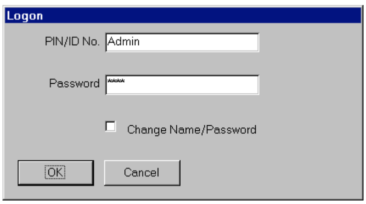


3. Select the **FaciliWorks 7** program group, then choose **FaciliWorks 7**. The Main Menu will appear.



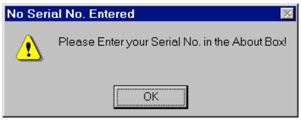
FaciliWorks Logon

If you have set up system security specific to the FaciliWorks program, a logon window will appear. Enter your PIN (Personal Identification Number) and password, then click the **OK** button. Please see page 265 for information on setting up system security and page 279 for information on user security.

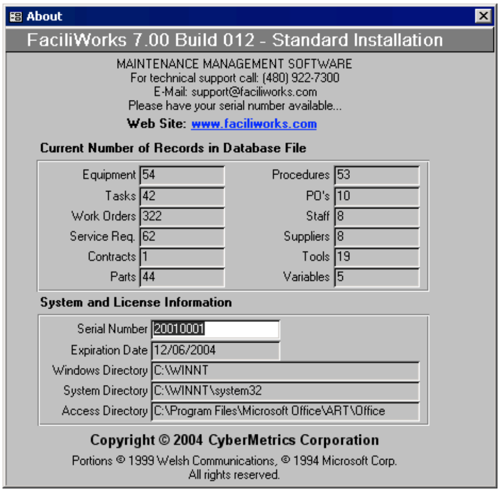


FaciliWorks Serial Number

If you haven't entered your program serial number into the **About** window, whenever you open FaciliWorks, the following message will appear to remind you to enter it:

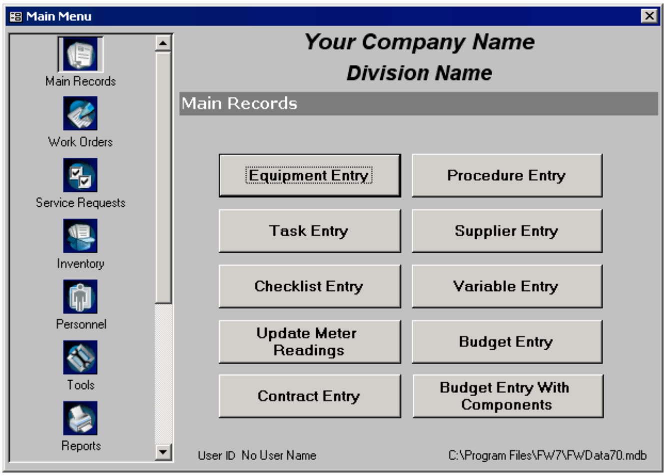


Click the **OK** button, and the **About** window will appear. Enter the serial number for your copy of FaciliWorks (the serial number is located in your manual, on the packing list that came with your package, and on your registration card). If you can't find your serial number, please contact CyberMetrics Technical Support at **(480) 922-7300.**



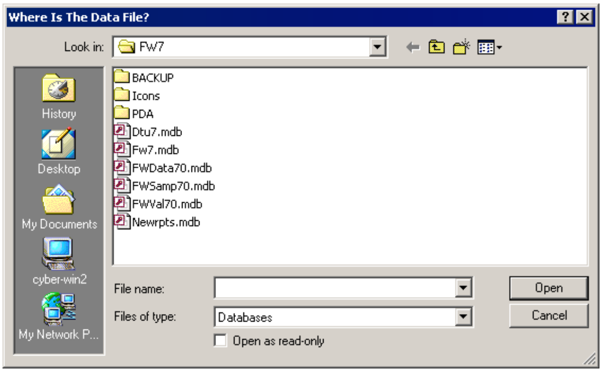
Main Menu

Note that the name of the currently logged-in user is displayed in the lower left corner. The full path to the attached database file, FWDATA70.MDB, is displayed in the lower right corner.



You can select from several different records and program setup menus. For a complete list of menu options, please see the *User's Manual*.

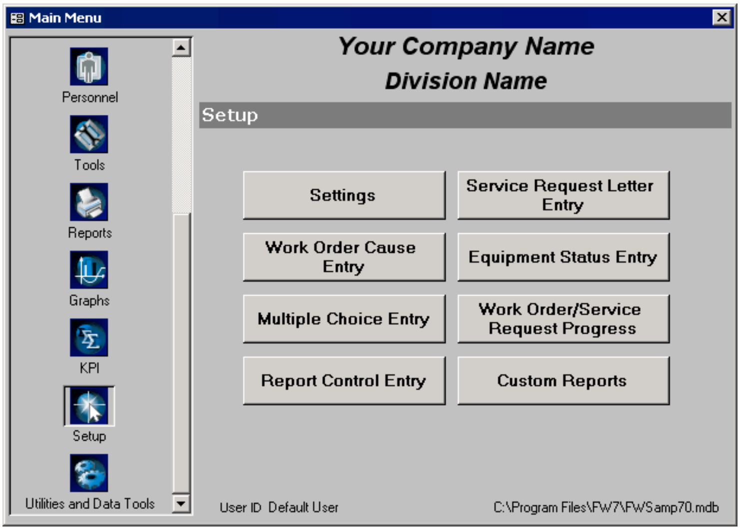
If you installed to a directory other than C:\PROGRAM FILES\FW7, or if the program cannot find your database file, then the **Open File** window will appear. Use this window to navigate through the available drives and directories until you find the database file. Remember, the file name must be FWDATA70.MDB. Do not select FW7.MDB; this is your program file.



Note: Users who have their database file located on the network server must be logged into the network operating system before they can open the database file.

Chapter 6: Program Setup

To set your program preferences and enter user information, select **Setup** from the Main Menu.



As you can see in the sample screen, you can select from several different functions in the **Setup** menu. To begin entering your user information, select **Settings.**

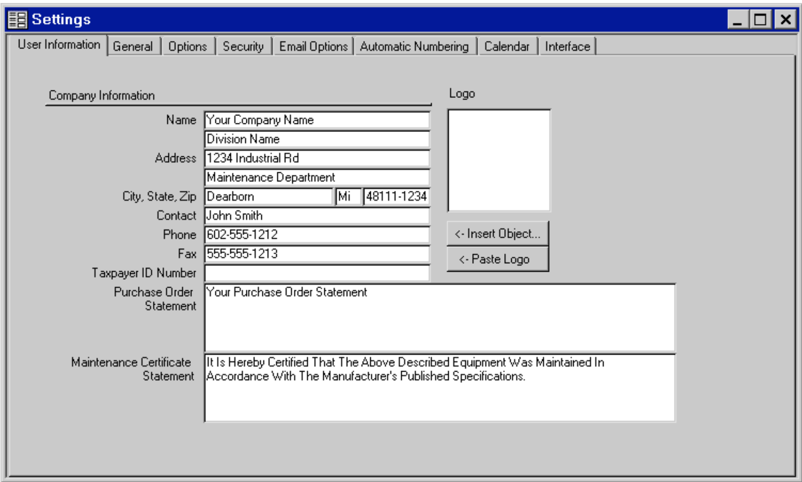
Settings

Use the **Settings** utility to:

- enter your company information and logo
- select your work order options and **Skip Dates**
- enter your **Maintenance Certificate Statement**
- customize the appearance of your Windows desktop
- enable/view the **Audit Trail**
- format FaciliWorks reports;
- enter your **Purchase Order Statement**
- enter your **Automatic Numbering** preference for work orders, purchase orders, and service requests
- enter tax rates for purchase orders
- enter your **Calendar Refresh** schedule
- choose your calendar color-coding
- view your custom field names
- edit all labels, tabs, forms, menu buttons, and icons

Settings—User Information

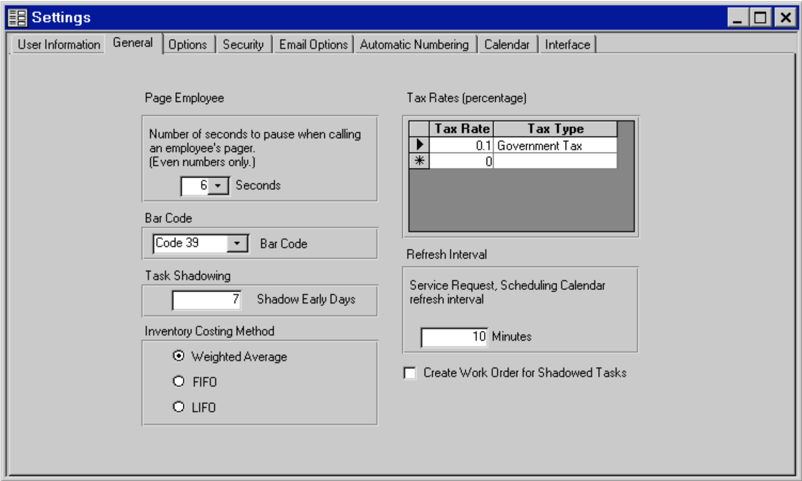
In the **Settings—User Information** screen, you can enter your company information and logo.



Field/Button Name	Description
Company Information	Enter your company name, address, phone numbers, and logo (optional). This address will be considered the "ship-to" address in any purchase orders that you create within FaciliWorks. The two lines for company name and the optional logo will appear at the top of all of your reports.
Contact	In this field, enter your name or department identification. If you aren't using FaciliWorks' security feature, the information that you enter here appears under **User Information** on the Main Menu. It then becomes part of the **Audit Trail** (see page 265).
Taxpayer ID Number	Enter your Federal Taxpayer ID Number if you want it to appear on your purchase orders.
Purchase Order Statement	Information or instructions entered here will appear on your purchase orders.
Maintenance Certificate Statement	Enter your maintenance certificate statement in this field. This statement is included Certificates of Maintenance, which might be required to satisfy equipment warranties. This field scrolls up and down so that you can enter longer statements.
Insert Object; Paste Logo	Use **Insert Object** to insert a graphics file of your logo and link it to FaciliWorks. FaciliWorks supports graphics of the following types :.BMP, .GIF, .TIF, JPG Use the **Paste Logo** button to copy your company logo from another program and paste it into FaciliWorks. Ideally, the logo graphic you insert or paste should be no larger than the space provided (about 1" square), and use no more than 8-bit color (256 colors). Larger graphics using higher color resolution may use system resources unnecessarily. This may slow down report printing, or prevent your logo from being printed at all. If your logo is visible in Settings—User Information, but does not appear on your reports, it requires too much memory and should be replaced with a smaller graphic using fewer colors. For best results, we recommend that you paste your logo into FaciliWorks as a .BMP, regardless of how it was originally created.

Settings—General

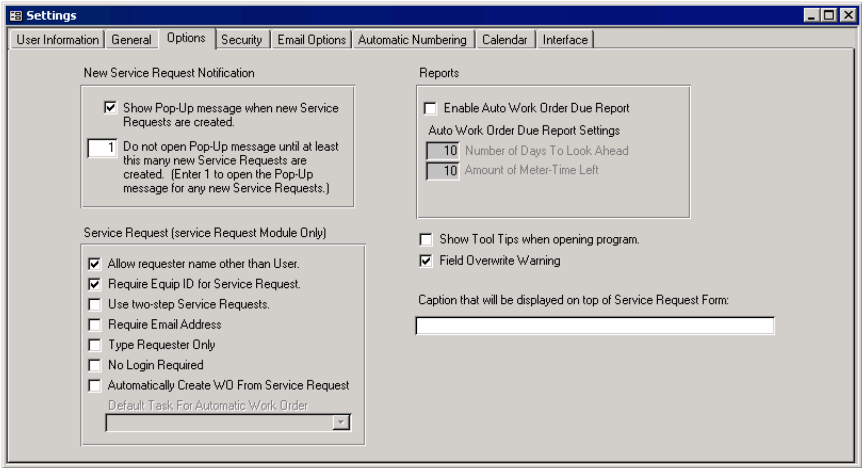
After you enter your user information, go to the **General** tab:



Field/Button Name	Description
Page Employee—Number of seconds to pause when calling an employee's pager	FaciliWorks works only with an AT compatible modem. If you have difficulty paging your employees, it could be because you don't have a long enough pause between the dialing of the pager number, the answering of the pager by the service provider, and the automatic sending of the number for the employee to call. We suggest that you begin with a six-second delay. You can later increase or decrease this pause as needed.
Bar Code	Select the type of bar code format you want to use in FaciliWorks. You can select Code 39 (contains capital letters and numbers) or Code 128 (contains letters, numbers, control characters, and some symbols). After you select the bar code format, FaciliWorks asks if you want to run the **Find Uncodeable Records** utility (see page 322 for information).
Task Shadowing Shadow Early Days	Indicate the maximum number of days ahead of the shadowed task that completing a shadowing task should result in the completion of the shadowed task.
Inventory Costing Method	Click on a circular radio button to indicate which inventory costing method your accounting department uses.
Tax Rates	Enter the tax percentages and types that may apply to your purchases. When you create purchase orders, you can select the tax rate and type from this list.
Service Request, Scheduling Calendar Refresh interval	In this field, enter a time period in minutes. When you open FaciliWorks' **Calendar**, the program will automatically update the data according to this interval. See page 170 of the *User's Manual* for more information about the calendar.
Create Work Order for Shadowed Tasks	Check this checkbox if you want FaciliWorks to generate a separate work order for a task that is covered by a shadowing task.

Settings—Options

When you click on the **Options** tab, you'll see this screen:

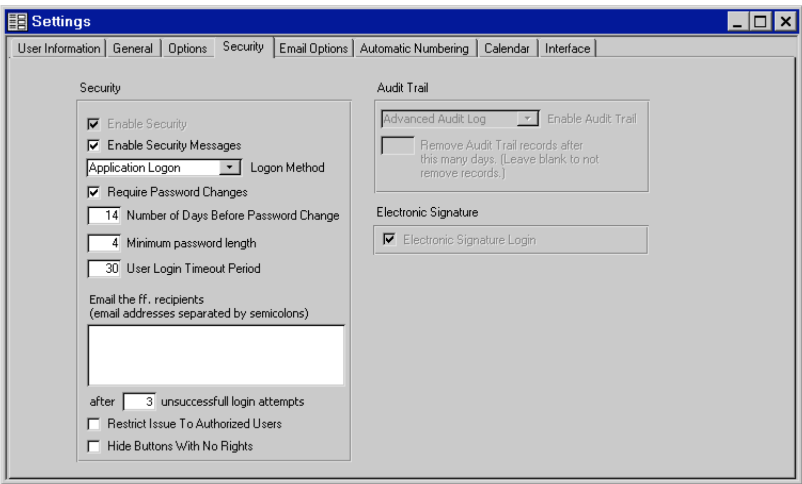


Field/Button Name	Description
New Service Request Notification	If you want FaciliWorks to tell you when users enter new service requests, place a check in the **Show Pop Up Message** box. In the other field in this section, enter the number of service requests that should be entered before you receive notification. For example, if you enter `1` in this field, FaciliWorks will tell you every time someone creates a new service request. If you enter `3`, FaciliWorks will wait until three service requests have been created, then notify you.
Service Request (Service Request Module only)	If you have the optional Service Request Module installed, choose whether you want to apply these options. **Allow requester name other than user** lets users enter service requester names other than their own. **Require Equip ID for Service Request** lets you choose whether you want requesters to reference an equipment ID with every service request. **Use two-step Service Requests** requires that service requests be given both preliminary and final approval before they become work orders. *Require Email Address* requires requesters to submit an e-mail address with their service request. *Type Requester Only* disables the drop-down list of requester names in the Service Request Module, so users must type their names into the name field whenever they submit a service request. *No Login Required* lets users submit service requests without logging in. This option is grayed out if FaciliWorks is installed under 21 CFR Part 11, so users must log in to submit service requests. *Automatically Create WO from Service Request*, on the other hand, allows you to create a work order from a service request. Marking this checkbox enables the combo box, which lists the tasks. Once you choose a task and go to Service Requests – Create Service Requests, the task ID field is automatically filled and all you have to do is complete the information on the screen and click the Create WO button (see Service Requests – Create Service Requests on page 178).

Field/Button Name	Description
Enable Auto Work Order Due Report	If you check this box, whenever you open FaciliWorks, a **Work Order Due Listing** report (in **Preview** mode) will automatically pop up. This report shows equipment IDs that are due or past due for maintenance. You can print the report or close it to continue into FaciliWorks. If you have no due or past due tasks, a dialog box will pop up and tell you that no equipment was due for maintenance.
Auto Work Order Due Report Settings	These two fields allow you to determine the criteria for the **Auto Work Order Due** report. **Number of Days to Look Ahead** determines how far ahead the report will search for date-based maintenance (for example, if you enter `7`, equipment doesn't appear on the report until the maintenance due date is a week or less away). **Amount of Meter-Time Left** determines how much usage equipment should have left before it appears on the report (for example, if you enter `10`, equipment doesn't appear on the report until its current meter usage is ten units less than the meter value at which maintenance is due).
Show Tool Tips . . .	Check this box if you want to see a different usage tip whenever you open FaciliWorks. This is a convenient way to learn more about your software.
Field Overwrite Warning	If this box is checked and a user tries to modify an existing key field (such as Equip ID or *Task ID*), a dialog box will warn the user that they are about to change a key field.

Settings—Security

In this window, you can enable and set options for FaciliWorks' security and audit trail features.

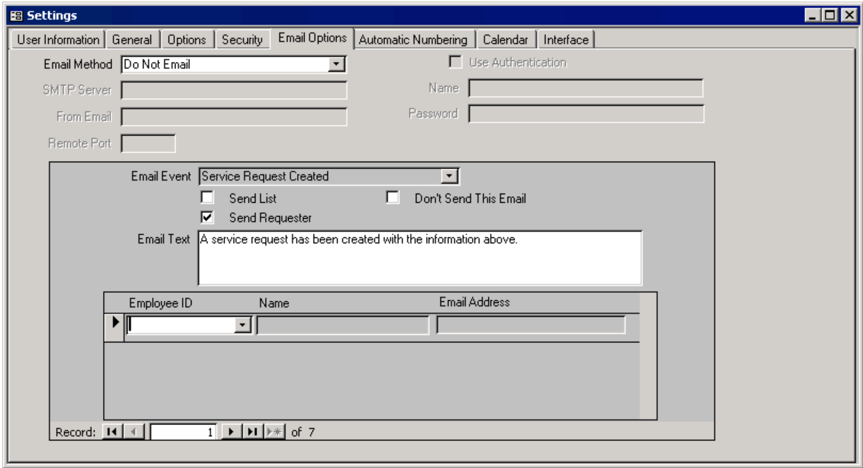


Field/Button Name	Description
Enable Security	Check this box if you want to use system security with FaciliWorks. You can create user security groups and assign group permissions in the **Security** utility (see page 279).

Field/Button Name	Description
Enable Security Messages	If you check this box, FaciliWorks will display warning messages if users try to perform actions, such as deleting records, they don't have permission to do. If you leave this box unchecked, users won't see messages, but will still be unable to do anything they don't have permission to do.
Logon Method	FaciliWorks allows you to choose from two types of system security: ▪ *Windows Logon*–uses security from your Windows operating system; when users log in to Windows, they can access FaciliWorks ▪ *Application Logon*–uses security specific to the FaciliWorks program; you must set up user IDs and passwords in **Security** (see page 283)
Require Password Changes	Check this checkbox to require users to change their logon passwords at intervals chosen by the administrator. When this option is selected, you may choose any number of days for this interval. The default interval is 14 days.
Minimum Password Length	Enter the minimum number of characters FaciliWorks will allow for user-defined passwords.
User Login Timeout Period	Enter the number of minutes of inactivity FaciliWorks will allow before automatically logging out a user.
Email the ff. recipients...	Enter a list of e-mail addresses, separated by semicolons, that will receive an automatic e-mail notification after the number of unsuccessful login attempts set in the *after ____ unsuccessful login attempts* field.
Restrict Issue To Authorized Users	Check this checkbox if you wish equipment to be issued only to authorized users. If you select this option, you cannot override it for individual equipment in **Equipment Entry—Auth. Persons** (see page 94).
Hide Buttons With No Rights	Check this checkbox to hide buttons from users who do not have rights to view forms or perform actions activated by those buttons. If you leave this checkbox unchecked, users can see those buttons but will receive an error message when those buttons are clicked.
Enable Audit Trail	If you want to record actions users perform in the program, such as record modifications and deletions, check the **Enable Audit Trail** box. The **Audit Trail** lists every action and the user who performed it. To see the **Audit Trail**, select **Audit Log** from the **Utilities and Data Tools** menu.
Remove Audit Trail Records...	Enter how many days' worth of audit trail records you want to keep. FaciliWorks will automatically purge and delete actions older than this value. For example, enter 7 to keep a week's worth of **Audit Trail** data. Enter 0 if you want to keep a comprehensive audit trail record.
Electronic Signature Login	Check this box to require users to login before signing any record.

Settings—Email Options

FaciliWorks 7 now includes e-mailing capabilities; you can choose a standard MAPI client such as Microsoft Outlook or Outlook Express, or use SMTP to connect directly to the e-mail server you have set.



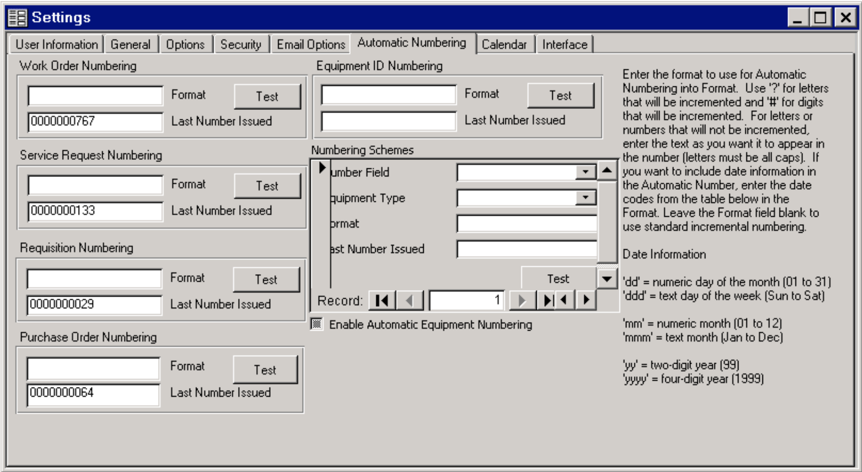
The automatic e-mail notification is designed to send e-mails to the person who created the service request or to a list of users. A set of e-mails has been created for various steps in the service request-work order process. This function requires that at least one workstation be running FaciliWorks; this workstation must have a functional MAPI compliant e-mail program installed. The program does not need to be running, but it must be present on the workstation.

Field/Button Name	Description
Email Method	**MAPI Client:** Choose this option to use default e-mail client such as Microsoft Outlook, Outlook Express, or any other local e-mail system. **SMTP (Common Network):** Specify here your e-mail provider and the program sends the e-mail directly using a specified e-mail sender. **SMTP (Workstation Specific):** Same as above but system registry specific
From Email	Specify the default e-mail sender. This option is not available if you select **MAPI Client.**
SMTP Server	Specifies the SMTP server used to send and receive e-mails; this option is not available if you select **MAPI Client.**
Remote Port	Ask your administrator for this value; this option is not available if you select **MAPI Client.**
Email Event	These predefined e-mail events cannot be modified, added to, or deleted. These events are defined as follows: **Service Request Created:** This e-mail is automatically sent when a service request is created. The program checks periodically for new service requests. The frequency of the check is based on the Refresh Interval in **Settings**. The created e-mail will be sent no matter how the service request is created. **Service Request Acknowledged:** This is sent to acknowledge a service request. Acknowledgment is not sent automatically; it can be sent manually from the **Edit Service Request Notification** tab. **Service Request Approved:** This e-mail is sent when a service request is approved. The

Field/Button Name	Description
	program checks periodically for newly approved service requests. The frequency of the check is based on the Refresh Interval in **Settings**. The approved e-mail will be sent no matter how the service request is created. **Service Request Closed:** This e-mail is sent when a service request is closed without a work order being created. This e-mail is automatically sent immediately upon the service request being closed. **Work Order Created:** This e-mail is automatically sent when a work order is created from the service request. **Late Notice:** This e-mail is sent when a service request will be delayed or late. Late notification is not an automatic e-mail, it can be sent manually from the **Edit Service Request Notification** tab. **Work Order Completed:** This e-mail is automatically sent when a work order created from the service request is completed. This e-mail can also be sent manually from the **Edit Service Request Notification** tab.
Send List	Check this checkbox to notify a list of personnel of the service request's status. Select an Employee ID from the drop-down list to add that employee to the notification list. Each e-mail event can have a unique list of personnel. Note: **You cannot enter Employee IDs manually; they must be selected from the drop-down Employee ID list, which is drawn from the list created in Staff Entry.**
Send Requester	Check this checkbox to notify the requester of the service request's status.
Don't Send This Email	Check this checkbox if you do not want to send emails for this event.
Email Text	Specify the default email content to be sent
Employee Listing	Specify the employees the emails are to be sent.

Settings—Automatic Numbering

In this window, you can create the formats you want to use for your work order, purchase order, requisition, and service request numbers. For your convenience, basic instructions and codes are listed on the right side of this screen, including notes about date formats.



Your number format can include numbers, letters, dates, or any combination of these characters. For example, you can create a work order numbering system that includes the code WO (for "work order"), the day of the week on which the work order is created, and a sequential number. In this case, a sample work order number would be WO-MON-00014. You can also create a format that uses today's date for the number, such as YYYYMMDD##. Then, if you create a work order on May 10, 2050, the first work order number would be 2050051000.

Here are some basic tips for creating your numbering formats:

- Use all capital letters.
- Use the # symbol for numbers.
- Use the ? symbol for letters.
- Use the code "DD" for the date of the month created.
- Use the code "DDD" for the day of the week created (Monday, Tuesday, etc.).
- Use 20 characters or less in your numbering format; otherwise, the numbers won't fit on your reports.

If you want to start your numbers with A and/or 0, use the # and ? symbols in your format. For example, if you entered PO-???-# # # # # in this screen, your first purchase order number would be PO-AAA-00000.

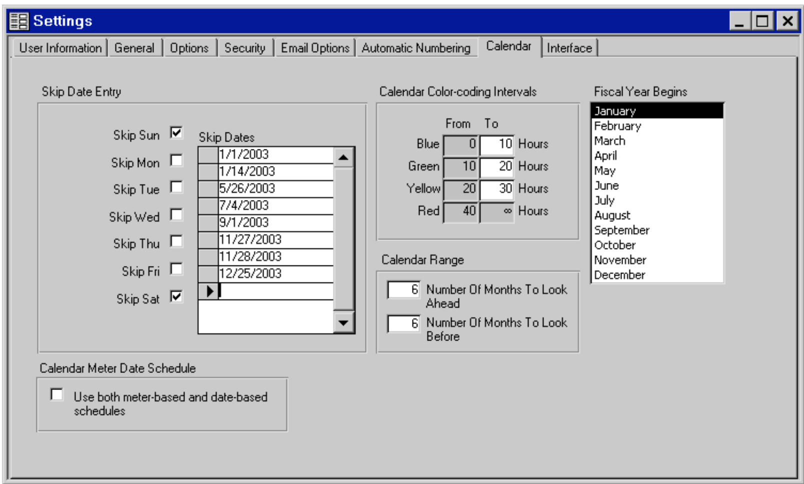
To start your numbers with a specific number and/or letter code, enter the exact code in this screen. For example, if you entered `ACW-00002` in this screen, the next number would be ACW-00003.

Click the **Test** button to see a preview of the next number in the sequence, based on the format you created.

> **Note: Once FaciliWorks creates an automatic number, it cannot re-issue that number. For example, let's say that you go to Create Purchase Orders and create a new record, then decide to close that record without saving it. FaciliWorks automatically inserted a new purchase order number. When you close the record without saving it, FaciliWorks won't reuse that number for the next new purchase order; instead, it will create the next number in the sequence.**

Settings—Calendar

FaciliWorks' calendar allows you to define certain dates and days of the week that you want to skip when the program calculates maintenance due dates. Skip dates might include holidays, vacation periods, or plant shutdown periods. To access this feature, go to the **Calendar** tab.



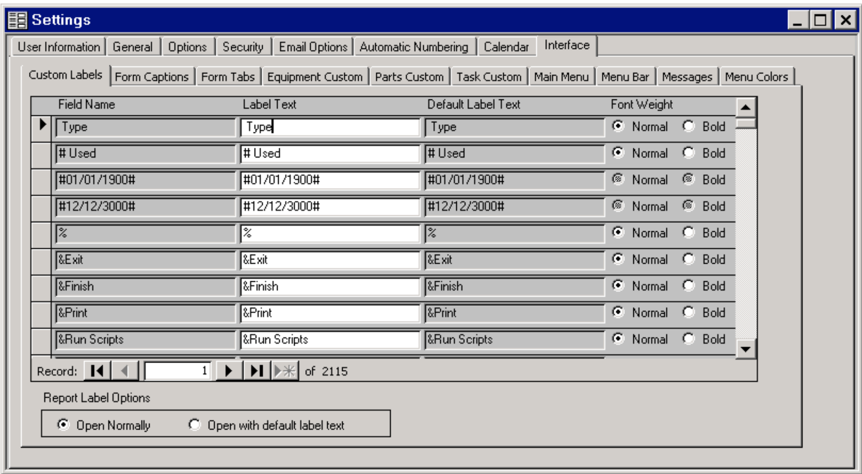
Field/Button Name	Description
Skip Date Entry	To skip certain *days of the week* (such as Saturday or Sunday), click on the checkbox next to each day that you want to. In the **Skip Dates** field box, you can enter an unlimited number of skip dates. Double-click in each row to access a pop-up calendar from which you can select your skip dates. Skip dates can also be manually entered. **Note: If a *calculated* maintenance due date happens to fall on any skip day or date, FaciliWorks schedules it for the previous day. However, if you *manually* enter a maintenance due date, then FaciliWorks won't apply your skip dates. Also, the calendar shows equipment that has exceeded its meter time as due on the current date, regardless of whether it is a skip date (or day).** **When you complete a work order, if the skip days or skip dates would cause the next due date to occur on or before the date on which you performed the work order, then the next due date moves to the next available date after the skipped days or dates. For example, if a work order that must be completed once every day (a one-day frequency) is completed on Friday, and Saturday and Sunday are skip days, then the next maintenance falls due on Monday. However, if a work order with a frequency of two or more days is due on a Saturday or Sunday, and those days are skip days, the maintenance will be due on Friday.**
Calendar Meter Date Schedule Use both meter-based and date-based schedules	Check this checkbox to use both meter-based and date-based schedules. If this checkbox is not checked, FaciliWorks uses date-based schedules only.
Calendar Color-Coding Intervals	FaciliWorks' scheduling **Calendar** shows you a quick summary of scheduled maintenance for each day. Entries in the calendar are color-coded by the total number of hours that the maintenance for that day will take. This section lets you assign the range of time (in hours) to each color. **Note: You must use blue for your shortest range of time and red for your longest range of time.**

Field/Button Name	Description
Calendar Range	In the **Calendar Range** section, you can determine what range of time you want FaciliWorks' scheduling **Calendar** to show you. The two fields in this section are **Number of Months to Look Ahead** and **Number of Months to Look Before**. If you want to see only the schedule for the current month, enter 0 in both of these fields (you won't be able to see any previous or future months). These fields default to showing you the prior month (1 in the **Look Before** field) and the next 12 months into the future (12 in the **Look Ahead** field).
Fiscal Year Begins	Click on the name of the month your company's fiscal year begins with. FaciliWorks uses this information in calculating budgets.

Settings—Interface

Changing Field Labels in FaciliWorks

You can rename any FaciliWorks field to better suit your needs. For example, your company might use the term "equipment code" instead of "equipment ID". You can then change the **Equipment ID** field to "**Equipment Code**". To change field names, go to the main information screen for any record entry form, then click in the upper left corner of the form. Another screen will open:



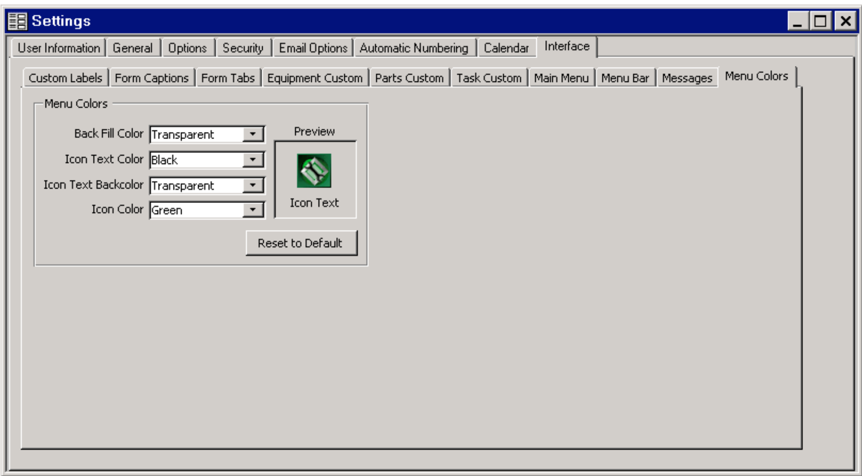
In this screen, you can change any of the field names that appear. Your changes will appear anywhere in FaciliWorks where the field appears. To change a field's label, go to its **Label Text** box and make the necessary changes. You can also choose to make field labels bold or normal in appearance. The fields and buttons in this screen are explained in the following table:

Field/Button Name	Description
Font Weight	Click this button to change the font weight of other labels to the opposite of the current field. For example, if you click this button while in a field marked "Bold", FaciliWorks asks if you want to change the weight of the other fields to "Normal."
Open Normally	Select this option to see your custom field labels.
Open with default label text	Use this button to temporarily change field labels back to their default names. This button is useful if, for example, you need to contact Technical Support about a question on a particular field and need the original field name.

The **Settings—Interface** window displays a complete list of your current field names. These are broken down into the following tabs: **Custom Labels, Form Captions, Form Tabs, Equipment Custom, Parts Custom, Task Custom, Main Menu, Menu Bar,** and **Messages.** All of these elements are completely customizable. You can use these to rename interface elements to fit your company's terminology, or even translate FaciliWorks' interface into a language other than English.

Changing Menu Colors on FaciliWorks

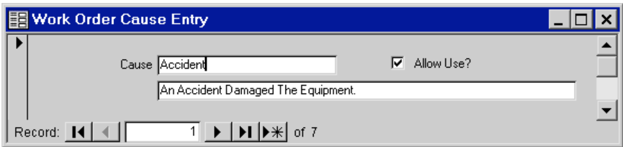
You can also customize the user interface of your application. For example, you find the green background a bit dull for your tastes, you can change the color in the Menu Colors tab in Settings—Interface.



This screen allows you to modify the icons' foreground and background shades, as well as font colors to something more visually pleasing for you. As you customize the user interface, your choices for each element you modify are displayed in the Preview window to your right. This allows you to view your changes immediately, saving you time and effort.

Work Order Cause Entry

In FaciliWorks, you can track your work orders and service requests by cause. For example, you could create a cause called "Accident" and define it as "An accident damaged the equipment" (as in the sample screen). Users could then choose "Accident" in the **Cause** fields for applicable work orders and service requests. You could later filter and create report listings of all work orders and service requests that were needed because of accidents.



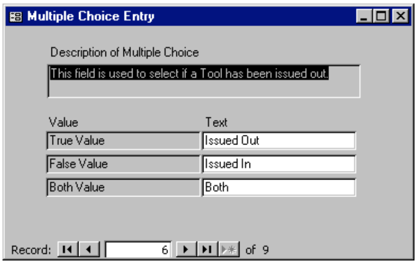
To define causes, select **Work Order Cause Entry** from the **Setup** menu. In this screen, you can define causes and enable (or disable) their use. This feature lets you remove a cause from the list of available causes without deleting it, which means that you can still use it for report filtering and reserve it to use again later.

First, enter a unique name for the cause in the **Cause** field, then enter its description underneath the name. Check the **Allow Use** box to make this cause available in your entry screens. Later, if you want don't want a cause to be available for data entry, but still need it for report filtering, return to this screen and uncheck the **Allow Use** box. You can create as many causes as you need.

Multiple Choice Entry

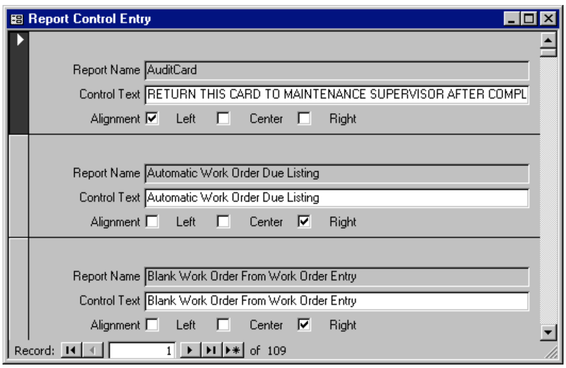
In certain FaciliWorks filter fields, you can select entries from a pre-defined list. To edit the descriptions that appear in these fields, go to **Multiple Choice Entry** from the **Setup** menu. You can enter your own descriptions for these fields, but you can't change their *values* (meanings). Use the record navigation arrows to move to different field records.

The sample screen shows how the administrator defined descriptions for tools that are checked out. Now, when a user opens a filter that has an **Issued Out** field, he or she can select from the three choices the administrator named in this screen ***(*Issued Out, Issued In,** or **Both*)*.** Note that, regardless of name, the available choices are still **True** (include tools that **are** issued out), **False** (include tools that **are not** issued out), or **Both** (include **both** types of tools).



Report Control Entry

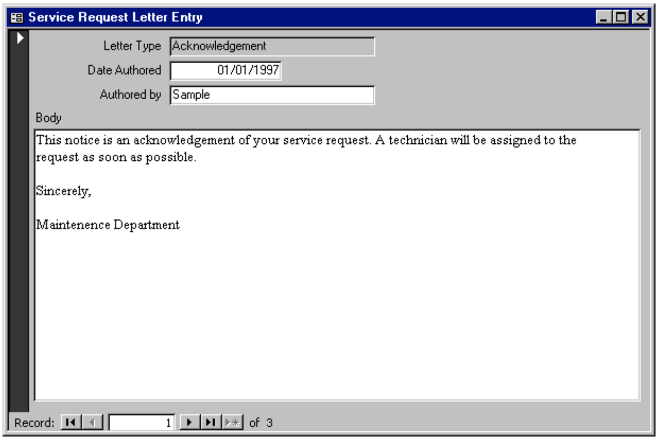
If your company must comply with ISO or QS 9000 Document Identification and Control requirements, you can set up FaciliWorks to identify each report with a document control number. To use this feature, select **Report Control Entry** from the **Setup** menu. Then enter your control text for each report. Report control IDs will appear at the bottom of reports, using the alignment you have chosen for each report (left, center, or right). If you aren't required to use a control number, you may enter any other information you want to appear at the bottom of your reports (such as your company address).



Service Request Letter Entry

Service Request Letter Entry lets you edit service request letters. Select this utility from the **Setup** menu.

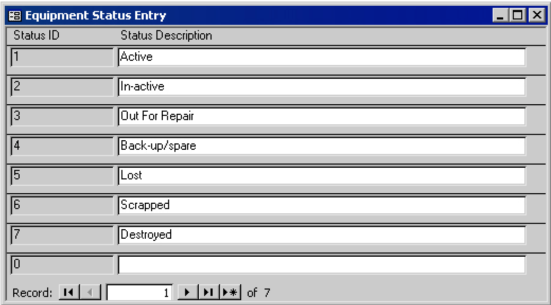
In the **Letter Entry** screen, enter the **Date Authored, Authored By,** and **Body** of each letter.



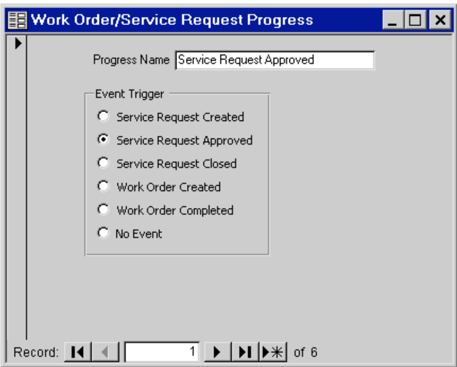
Equipment Status Entry

The **Equipment Entry Status** field is user-defined; you can assign your own descriptions to each status ID (except for **Status 1—Active**; see below). To set up these IDs, choose **Equipment Status Entry** from the **Setup** menu.

In the **Equipment Status Entry** screen, enter the descriptions you want to appear in the **Status** list. Status descriptions might be **Inactive, Out for Repair, Backup/Spare, Lost,** or **Retired**. You must use status ID 1 for "Active" equipment. The "1" tells FaciliWorks that the equipment is currently in use. This means that only equipment marked as status 1 will appear on lists of equipment due for maintenance and on automatic work orders. Therefore, **do not delete** status ID 1 (Active).



Work Order/Service Request Progress



You can create and edit the progress names that FaciliWorks displays in work order and service request status fields in this window. The **Progress Name** field shows the name of the progress status that is displayed; the radio buttons under **Event Trigger** indicate when FaciliWorks will automatically change the status of a service request or work order.

Custom Reports

Custom Reports are discussed in *Chapter 10: Custom Reports*, beginning on page 325.

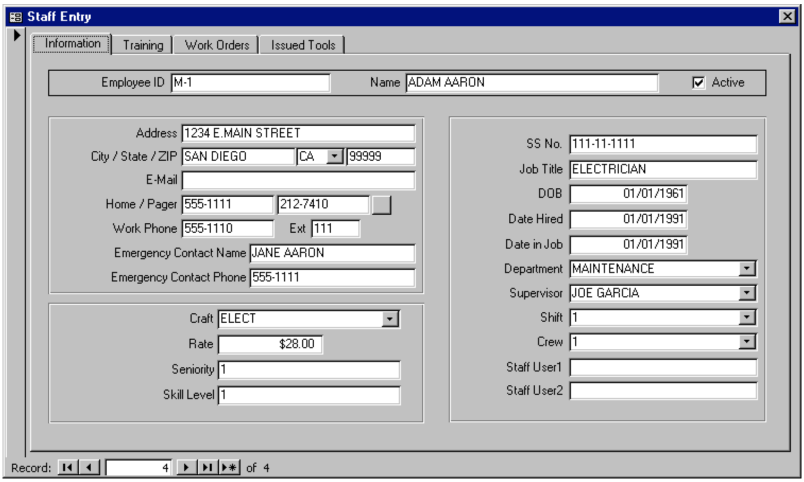
Chapter 7: Personnel

Select the **Personnel** menu to enter user records and assign security permissions.

Staff Entry

In **Staff Entry**, you can enter and view detailed employee records for your maintenance staff, including training information, assigned work orders, and tools issued to each employee.

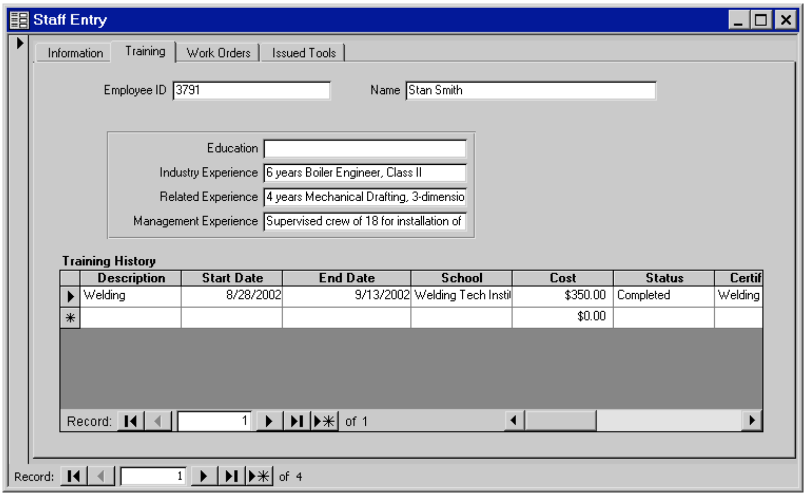
Staff Entry—Information



The following table explains each of the fields and buttons in this screen:

Field Name	**Description**
Employee ID	Enter a unique alphanumeric identifier for each employee.
Name	In this field, enter the employee's full name.
Active	Check this box to show that the employee is currently active. If you don't mark the employee as active, his or her name won't appear on reports that list available employees.
Address, City, State, **and** Zip	Enter the employee's mailing address, including city, state, and zip code.
E-Mail	Enter the employee's e-mail address.
Home/Pager and Work Phone/Ext.	Enter the employee's home phone number and pager number, then enter his or her work number and extension.
Emrgcy. Contact Name **and** Phone	Enter the person to contact in case of emergency, then enter this person's phone number.
Craft	Use this field to categorize your workers by profession. You can use a description, such as welder or electrical engineer; a code, *like MIG-3;* or a union number combined with a classification, such as *786-Journeyman* or *786-Apprentice.*
Rate	In this field, enter the employee's hourly rate. FaciliWorks uses this rate to calculate the cost of maintenance.
Seniority	Enter the seniority or other work status of the employee. You could use this field to store the date that determines seniority.
Skill Level	Using either an internal or external classification system, assign a skill level to each employee. You could also use this field to indicate multiple skills for your employees, assigning letters or numbers for different skills.
SS No.	Enter the employee's social security number.
Job Title	In this field, enter the employee's official job title.
DOB	Next, enter the employee's date of birth.
Date Hired and Date in Job	Enter the date(s) on which you hired the employee and when the employee started his or her current position.
Department	In this field, enter the name of the employee's primary department.
Supervisor	Enter the name of the employee's direct supervisor.
Shift	Indicate the shift(s) for which this employee is available.
Crew	Use this field to track the name of the crew(s) to which this employee either belongs or is qualified to belong.
Staff User 1 and Staff User 2	Use these two fields to store any additional information. See page 273 for more information.

Staff Entry—Training



Use the **Staff Entry—Training** screen to keep track of the employee's current and continuing education. The table below describes the fields in this screen.

Field Name	Description
Education	Give a basic description of the employee's education.
Industry Experience	Enter the employee's experience here; for example, *"6 years Boiler Engineer, Class II"*.
Related Experience	Use this field to track any other useful experience, such as *"4 years Mechanical Drafting—3-dimensional blueprints"*.
Management Experience	Enter any management experience that the employee has–for example, *"Supervised crew of 18 for installation of 3 cooling towers in 1996"*.

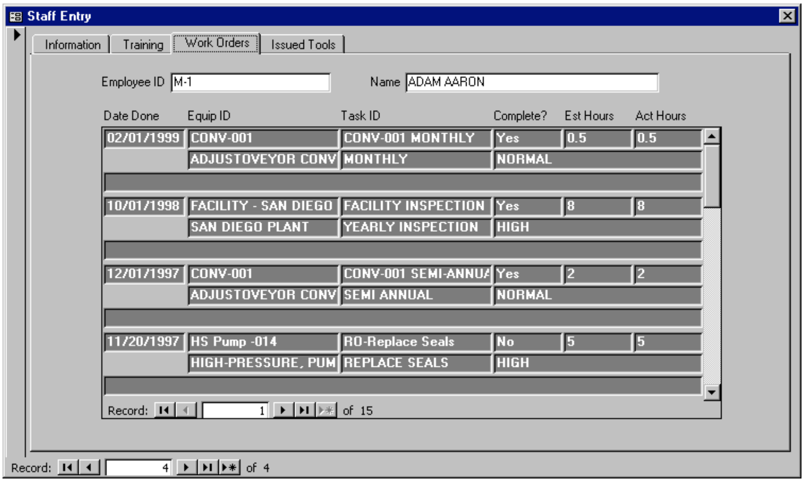
Training History

In this section, you can track classes or certifications that each employee has completed. Use the scroll bar at the bottom of the screen to see the different fields.

Field Name	Description
Description	Enter a brief description of the training.
Start Date and End Date	In these fields, enter the beginning and ending dates of the training.
School	Enter the name of the school where the employee attended training.
Cost	Enter the cost of the class.
Status	Use this field to indicate whether the employee has finished this particular class.
Certification	If this training was for a particular certification, enter the type of certificate.

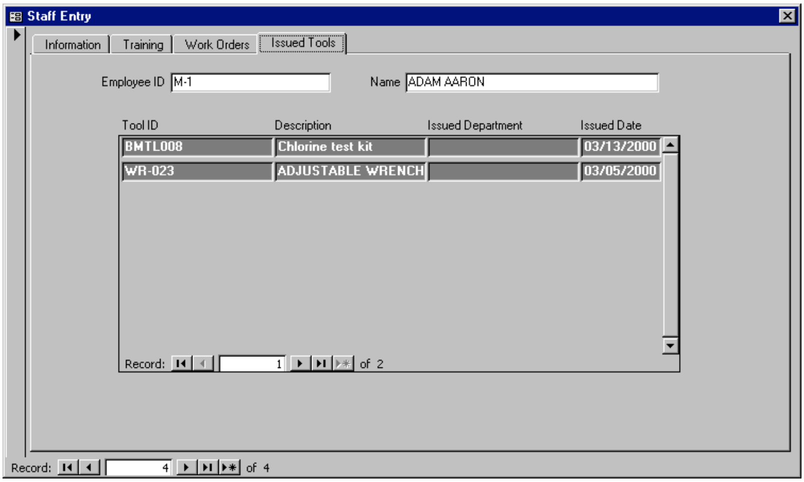
Field Name	Description
Cert. Expiration Date	If the certification is good for only a specified length of time, enter the expiration date in this field.
Hours	Enter how many hours the training was worth or how long it lasted.
CEUs (Continuing Education Units)	In this field, enter the number of credit units earned for the training.
Comments	Enter any other relevant information for this training or certification.

Staff Entry—Work Orders



Click this tab to see the work orders assigned to this employee. FaciliWorks automatically collects this information from your work order records. You can view this information here, but you can't edit any of it.

Staff Entry—Issued Tools



In this screen, you can view a list of tools that are currently checked out to this employee. Again, you can see the information, but you can't change any of it in this screen.

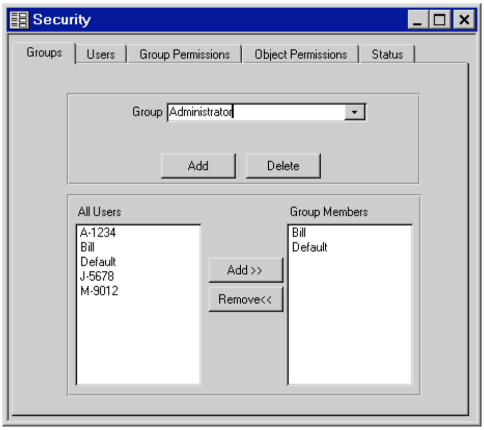
Security

FaciliWorks offers you several system security options, including logon options and program access options. You can assign users to pre-defined user groups, which saves the time you would spend assigning individual permissions. To access the **Security** feature, select it from **Personnel**.

Security Options

You can choose from two options in setting up login security for FaciliWorks. First, you can use Windows security, meaning that each user logs on to Windows from the Windows login screen, then can open FaciliWorks without entering a separate user ID and password. You can also set up FaciliWorks to require each user to have a unique user ID and password specific to the program. Please see **Setup – Settings – Security** on page 266 for more information.

Security–Groups



In the **Groups** tab, you can create and edit names of different security groups. To add a new group, enter the group's name in the **Group** field, then click the **Add→→** button. The program asks if you want to copy group permissions from another group. Click **Yes** to copy the rights or click **No** if you want to assign unique permissions to this group. To delete a group, go to this screen and select the name in the **Group** field, then click **Delete**.

For your convenience, FaciliWorks automatically contains several different security groups. Each group and its permissions are listed in the tables below.

Note: If a program area isn't listed for a particular group, it means that the group does not have any rights to that area.

Administrator

Program Area	Permission(s)
Equipment Entry	Edit/Add/Delete
Equipment Issue/Usage	Edit/Add/Delete
Equipment Task Records	Edit/Add/Delete
Task Entry	Edit/Add/Delete
Schedule	Edit/Add/Delete
Update Task Link	Edit/Add/Delete
Manual Create Scheduled Work Orders	Edit/Add/Delete
Edit Work Orders	Edit/Add/Delete
Export to PDA	Edit/Add/Delete
Calendar	Edit/Add/Delete
Work Order Status	Edit/Add/Delete
Create Service Requests	Edit/Add/Delete
Approve Service Requests	Edit/Add/Delete

Program Area	Permission(s)
Edit Service Requests	Edit/Add/Delete
Part Entry	Edit/Add/Delete
Create Purchase Orders	Edit/Add/Delete
Edit Purchase Orders	Edit/Add/Delete
Staff Entry	Edit/Add/Delete
Security	Edit/Add/Delete
Tool Entry	Edit/Add/Delete
Edit Tool Issue and Return Records	Edit/Add/Delete
Issue Tools	Edit/Add/Delete
Return Tools	Edit/Add/Delete
Contract Entry	Edit/Add/Delete
Procedure Entry	Edit/Add/Delete
Supplier Entry	Edit/Add/Delete
Variable Entry	Edit/Add/Delete
Budget Entry	Edit/Add/Delete
Settings	Edit/Add/Delete
Work Order Cause Entry	Edit/Add/Delete
Multiple Choice Entry	Edit/Add/Delete
Report Control Entry	Edit/Add/Delete
Service Request Letter Entry	Edit/Add/Delete
Equipment Status Entry	Edit/Add/Delete
Data Backup	Edit/Add/Delete
Import/Export Records	Edit/Add/Delete
Records Archive	Edit/Add/Delete
Report Queue	Print
Equipment Analysis	Print
Equipment BarCode Labels	Print
Equipment Detail Report	Print
Equipment Listing	Print
Equipment Location	Print
Equipment Status Report	Print
Equipment Usage History	Print
Warranty Due Listing	Print
Task Listing	Print
Request Work Orders Summary	Print
Service Request Work Orders	Print
Work Order	Print
Work Order Backlog Report	Print
Work Order Due Listing	Print

Program Area	Permission(s)
Work Order Schedule	Print
Work Orders by Location	Print
Maintenance Cost by Cause	Print
Staff Labor Performance	Print
Work Order Compare	Print
Work Order Cost Analysis	Print
Work Order Costs & Labor	Print
Work Order History	Print
Work Order Labels	Print
Work Order On Time Analysis	Print
Service Requests	Print
Service Requests by Requester	Print
Contract Listing	Print
Critical Part Listing	Print
Part BarCode Labels	Print
Part Consumption Listing	Print
Part Listing	Print
Part Listing – Low/Out of Stock	Print
Part Reorder Calculation	Print
Procedure Listing	Print
Staff Certificate Due Listing	Print
Staff Listing	Print
Supplier Listing	Print
Tool BarCode Labels	Print
Tool Issue History	Print
Tool Listing	Print
Out of Limit Variables	Print
Variable History Report	Print
Variable Listing	Print
PM Sign-in Sheet/Audit Cards	Print
Print Blank Entry Forms	Print
Report Control Listing	Print
Purchase Order Listing	Print
Import from PDA	Run
Modify License	Run
Calculate Due Dates and Meters	Run
Fill Maintenance Dates	Run
Fill Part and Tools Use	Run
Find Uncodeable Records	Run

Program Area	Permission(s)
Recover PDA Work Orders	Run
Remove Spaces	Run
Repair Work Order Dates	Run
Reset Open Tasks	Run

Guest

Program Area	Permission(s)
Equipment Entry	Read Only
Equipment Issue/Usage	Read Only
Equipment Task Records	Read Only
Task Entry	Read Only
Schedule	Read Only
Edit Work Orders	Read Only
Calendar	Read Only
Work Order Status	Read Only
Edit Service Requests	Read Only
Part Entry	Read Only
Edit Purchase Orders	Read Only
Tool Entry	Read Only
Edit Tool Issue and Return Records	Read Only
Contract Entry	Read Only
Procedure Entry	Read Only
Supplier Entry	Read Only
Variable Entry	Read Only
Equipment Status Entry	Read Only
Equipment Analysis	Print
Equipment BarCode Labels	Print
Equipment Detail Report	Print
Equipment Listing	Print
Equipment Location	Print
Equipment Status Report	Print
Equipment Usage History	Print
Warranty Due Listing	Print
Task Listing	Print
Request Work Orders Summary	Print
Service Request Work Orders	Print
Work Order	Print
Work Order Backlog Report	Print
Work Order Due Listing	Print

Program Area	Permission(s)
Work Order Schedule	Print
Work Orders by Location	Print
Maintenance Cost by Cause	Print
Work Order Compare	Print
Work Order Cost Analysis	Print
Work Order Costs & Labor	Print
Work Order History	Print
Work Order Labels	Print
Work Order On Time Analysis	Print
Service Requests	Print
Service Requests by Requester	Print
Contract Listing	Print
Part BarCode Labels	Print
Part Consumption Listing	Print
Part Listing	Print
Part Listing – Low/Out of Stock	Print
Procedure Listing	Print
Supplier Listing	Print
Tool BarCode Labels	Print
Tool Issue History	Print
Tool Listing	Print
Out of Limit Variables	Print
Variable History Report	Print
Variable Listing	Print
Report Control Listing	Print
Purchase Order Listing	Print

Requests

Program Area	Permission(s)
Schedule	Read Only
Edit Work Orders	Read Only
Calendar	Read Only
Work Order Status	Read Only
Create Service Requests	Add Only
Edit Service Requests	Read Only
Equipment Status Entry	Read Only
Request Work Orders Summary	Print
Service Request Work Orders	Print
Service Requests	Print

Program Area	Permission(s)
Service Requests by Requester	Print

User

Program Area	Permission(s)
Equipment Entry	Edit/Add
Equipment Issue/Usage	Edit/Add
Equipment Task Records	Edit/Add
Task Entry	Edit/Add
Schedule	Edit/Add
Update Task Link	Edit/Add
Manual Create Scheduled Work Orders	Edit/Add
Edit Work Orders	Edit/Add
Calendar	Edit/Add
Work Order Status	Edit/Add
Create Service Requests	Edit/Add
Edit Service Requests	Edit/Add
Part Entry	Edit/Add
Create Purchase Orders	Edit/Add
Edit Purchase Orders	Edit/Add
Staff Entry	Edit/Add
Tool Entry	Edit/Add
Edit Tool Issue and Return Records	Edit/Add
Issue Tools	Edit/Add
Return Tools	Edit/Add
Contract Entry	Edit/Add
Procedure Entry	Edit/Add
Supplier Entry	Edit/Add
Variable Entry	Edit/Add
Equipment Status Entry	Edit/Add
Report Queue	Print
Equipment Analysis	Print
Equipment BarCode Labels	Print
Equipment Detail Report	Print
Equipment Listing	Print
Equipment Location	Print
Equipment Status Report	Print
Equipment Usage History	Print
Warranty Due Listing	Print
Task Listing	Print

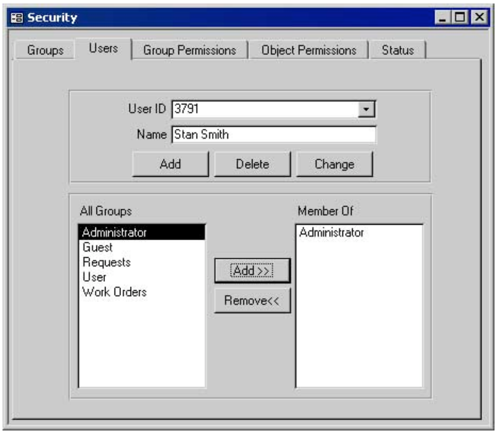
Program Area	Permission(s)
Request Work Orders Summary	Print
Service Request Work Orders	Print
Work Order	Print
Work Order Backlog Report	Print
Work Order Due Listing	Print
Work Order Schedule	Print
Work Orders by Location	Print
Maintenance Cost by Cause	Print
Work Order Compare	Print
Work Order Cost Analysis	Print
Work Order Costs & Labor	Print
Work Order History	Print
Work Order Labels	Print
Work Order On Time Analysis	Print
Service Requests	Print
Service Requests by Requester	Print
Contract Listing	Print
Critical Part Listing	Print
Part BarCode Labels	Print
Part Consumption Listing	Print
Part Listing	Print
Part Listing – Low/Out of Stock	Print
Part Reorder Calculation	Print
Procedure Listing	Print
Supplier Listing	Print
Tool BarCode Labels	Print
Tool Issue History	Print
Tool Listing	Print
Out of Limit Variables	Print
Variable History Report	Print
Variable Listing	Print
Print Blank Entry Forms	Print
Report Control Listing	Print
Purchase Order Listing	Print
Import from PDA	Run
Find Uncodeable Records	Run

Work Orders

Program Area	Permission(s)
Equipment Entry	Read Only
Equipment Task Records	Read Only
Task Entry	Read Only
Schedule	Read Only
Manual Create Scheduled Work Orders	Edit/Add
Edit Work Orders	Edit/Add
Calendar	Read Only
Work Order Status	Read Only
Edit Service Requests	Edit/Add
Issue Tools	Edit/Add
Return Tools	Edit/Add
Equipment Status Entry	Read Only
Report Queue	Print
Equipment BarCode Labels	Print
Equipment Detail Report	Print
Equipment Listing	Print
Equipment Location	Print
Warranty Due Listing	Print
Task Listing	Print
Request Work Orders Summary	Print
Service Request Work Orders	Print
Work Order	Print
Work Order Backlog Report	Print
Work Order Due Listing	Print
Work Order Schedule	Print
Work Orders by Location	Print
Work Order Compare	Print
Work Order Labels	Print
Service Requests	Print
Service Requests by Requester	Print
Critical Part Listing	Print
Part BarCode Labels	Print
Part Consumption Listing	Print
Part Listing	Print
Part Listing – Low/Out of Stock	Print
Part Reorder Calculation	Print
Tool BarCode Labels	Print
Tool Issue History	Print

Program Area	Permission(s)
Tool Listing	Print
Out of Limit Variables	Print
Variable History Report	Print
Variable Listing	Print
Import from PDA	Run
Find Uncodeable Records	Run
Reset Open Tasks	Run

Security–Users



In this screen, you can create, edit, and delete FaciliWorks user records. You can also assign users to security groups.

Setting Up New Users

To create a new user, enter the User ID and the name of the user in the appropriate fields, then click the **Add** button below the **Name** field. If you want to enter a password for the user, click the **Change** button; a password entry window will appear. If you do not enter a password, FaciliWorks will require the user to enter a password when he or she first logs into FaciliWorks.

In the bottom section of the screen, you can see a list of user groups. Highlight the group(s) to which this user should belong, then click the **Add** button to assign the user to the group(s). You'll see the member groups in the box on the right side of the screen. You must assign each user to at least one group.

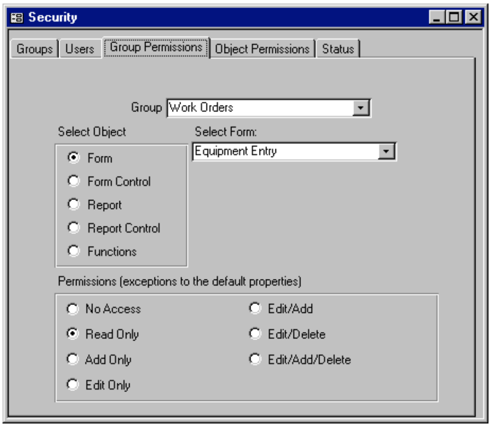
Tip: The user receives the highest level of privileges available in the groups to which he or she is assigned. For example, if the user is assigned to a group that cannot delete tool records, but is also assigned to a group that can delete tool records, he or she will have permission to delete tool records.

Changing or Deleting User IDs

To edit user information, first find the record, then click the **Change** button under the **ID** field. You can then change the user's full name or password. You cannot change a user ID, however; you can only delete it and create a new one. To delete a user ID, go to the record and click the **Delete** button under the **ID** field.

If you need to change a user's assigned security group(s), you can do so in the bottom part of the screen. To assign this user to additional security groups, select the applicable groups in the **All Groups** box, then click the **Add** button. If you need to take the user out of a group, highlight the group name in the **Member of** box, then click the **Remove** button.

Security–Group Permissions



You can create unique sets of rights for each group. To do so, go to the **Group Permissions** tab.

Tip: If you need to assign unique rights to an individual user, create a unique group for that user, then go to this screen to assign the specific rights.

This table explains the different fields and options in this screen:

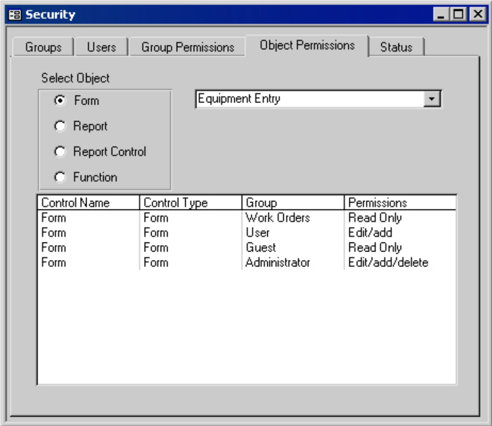
Field/Button Name	Description
Group	Select the name of the group whose rights you want to edit from the drop-down list.

Field/Button Name	Description
Select Object	Choose from these options by clicking in the appropriate circle: ▪ *Form*–edit permissions to record entry screens ▪ *Form Control*–assign rights to specific fields and buttons in entry forms ▪ *Report*–define permissions for FaciliWorks reports ▪ *Report Control*–edit rights to specific fields in reports ▪ *Functions*—assign rights to the following FaciliWorks functions: **Audit Log, Calculate Due Dates and Meters, Compact/Repair Database, Create Purchase Orders, Create Service Requests, Create Unscheduled Work Orders, Fill Maintenance Dates, Fill Part and Tool Use, Find Uncodeable Records, Import from PDA, Modify License, Recover PDA Work Orders, Remove Spaces, Repair Work Order Dates,** and **Reset Open Tasks**
Select Form/Report	This field appears when you select the object type. Simply choose each record or report category to which you need to assign rights for this group. You can edit rights for only one category at a time.
Select Control	If you choose to assign permissions to specific form or report controls, this field appears. First, choose the form or report in the *Select Form/Report* field. Then, select each field/button to which you want to assign specific rights. For example, if you want this group to be able to access and edit equipment records, but not clone them, select the *Clone* button in this field, then define the type of access in the *Permissions* field (see below).

Field/Button Name	Description
Permissions	The available options in this field will vary, depending on what specific object you choose. Each permission is listed below; remember that not all of them appear for every selection. Forms ▪ *No Access* – users cannot see, edit, add, or delete records in this category ▪ *Read Only* – users can only view records ▪ *Add Only* – users can only add new records in this category ▪ *Edit Only* – users cannot add or delete records, but can edit them ▪ *Edit/Add* – users can change and add new records ▪ *Edit/Delete* – users can edit or delete existing records, but not add new ones ▪ *Edit/Add/Delete* –users can change, add, and delete records in this category Form Controls ▪ *No Access* – users won't even see this field or button (for example, you can block users from seeing salary-related fields in **Staff Entry**) ▪ *Visible – Disabled* or *Enabled* – users see this button, but cannot use it ("disabled" and "enabled" refer only to the button's appearance) ▪ *Read Only – Disabled* or *Enabled* – users see this field, but cannot change its contents ("disabled" and "enabled" refer only to the button's appearance) ▪ *Read/Write* – users can view and change the contents of this field Reports ▪ *No Access* – users cannot view this report (it won't appear in the list of available reports on the **Reports** menu) ▪ *Print* – users can print this report Report Controls ▪ *Don't Print* – when users print this report, this field won't appear ▪ *Print* – when users print the report, this field will appear

Important: **Make sure you coordinate the permissions that you assign. For example, you can't allow a group to add new equipment records, but then remove their access to the *Equipment ID* field.**

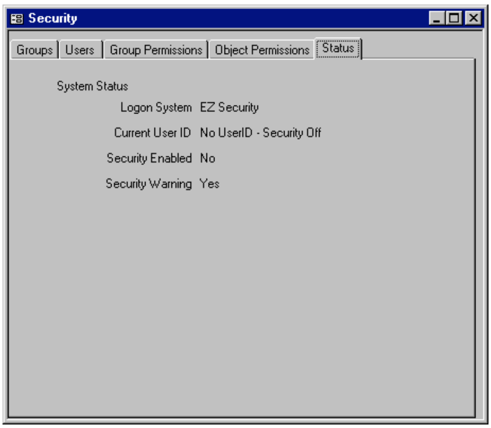
Security–Object Permissions



Use this screen to see a summary of the permissions you've assigned for a particular form or report. You'll find this feature helpful as you define specific rights in the **Group Permissions** tab.

First, choose if you want to see a **Form** or **Report**, then go to the drop-down list and select the specific object you want to see. FaciliWorks will show you a listing of permissions for that object, including control permissions (fields/buttons) and group names.

Security–Status

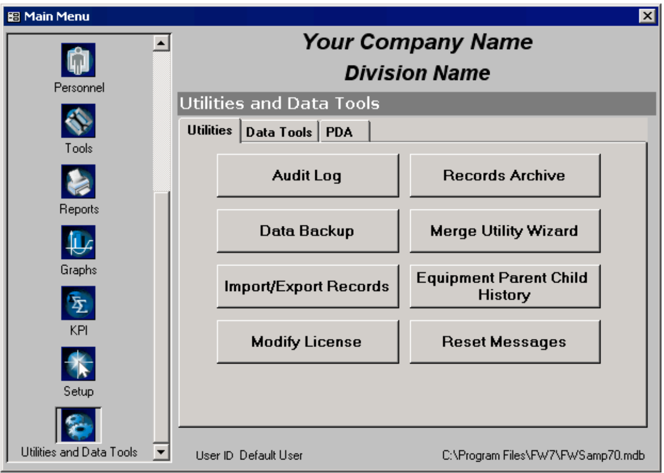


The **Status** screen gives you a quick view of your system security. The following table explains the fields in this screen:

Field/Button Name	Description
Logon System	This field tells you what type of logon security you're using (based on the selection you made in the **Settings–Options** screen).
Current User ID	The ID of the user who is currently logged in appears in this field.
Security Enabled	If system security is enabled in **Settings–Options**, this field shows "Yes"; otherwise, it shows "No."
Security Warning	Like the *Enabled* field, this field tells you whether security warning messages will appear if a user attempts to perform operations for which he or she doesn't have permission.

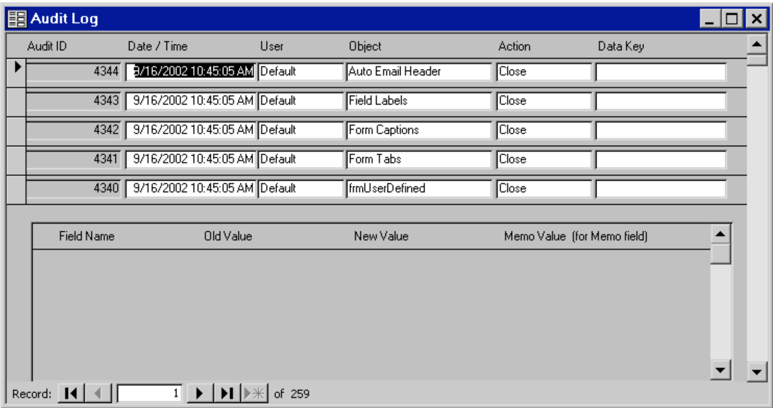
Chapter 8: Utilities

Utilities are functions you can use to maintain your FaciliWorks database.



Audit Log

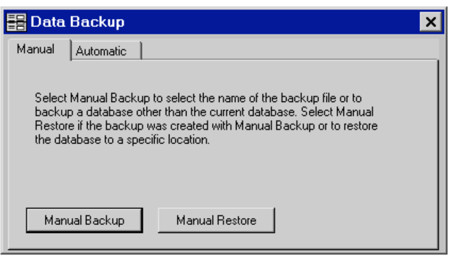
Audit Log lets you view database usage – time and date of user entry, the object and action taken and a detail of any value change from the database. This is a non-editable screen; the information in it can be filtered by clicking on the filter buttons in the toolbar or by selecting the filter options in the right-click contextual menu.



Data Backup

You should periodically make a backup copy of your FWDATA70.MDB database file (we suggest that you do this every day). To perform this task, we recommend that you use the built-in **Backup/Restore** feature that is a part of the program. However, if you have a specialized backup product (such as Colorado Backup or Zip drive), you may use that product instead.

FaciliWorks offers you two different ways to back up and/or restore your data—automatic or manual. When you select **Data Backup** from the **Utilities and Data Tools** menu, you'll see this screen:



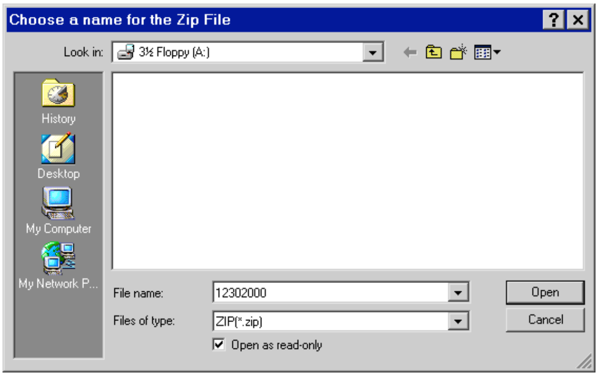
Manual Backup/Restore

Use the **Manual Backup and Restore** options if you want a different name for your backup file, or if you want to select a different database than your current one (the one shown in the right corner of the Main Menu). You can also use these options if you want to back up your data to a drive other than the [A:] drive (such as a Zip or Jaz drive).

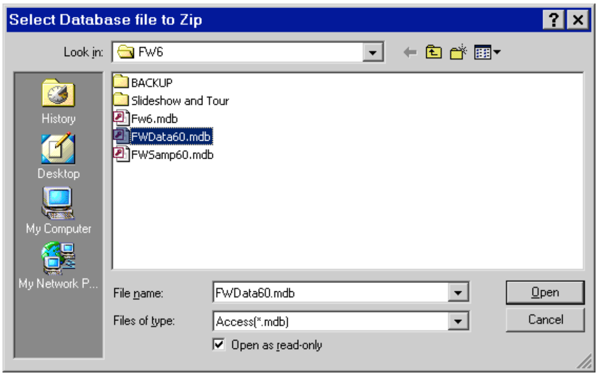
Manual Backup

To manually back up your database, click the **Manual Backup** button. A dialog box called **"Choose a name for the Zip file"** will appear.

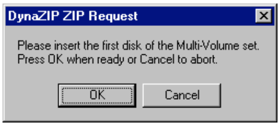
> **Note: Even if you are backing up your database to a volume other than a floppy diskette, you must insert a blank, preformatted diskette into your [A:] drive.**



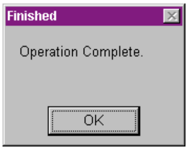
Enter the drive and name for your backup file. Next, select the database file that you want to back up and click the **Open** button.



The dialog box shown below will appear. Your diskette is already in the [A:] drive, so click **OK**.



A progress meter will display to show you the percentage of completion. If the backup requires more than one diskette, FaciliWorks will prompt you to insert another diskette.



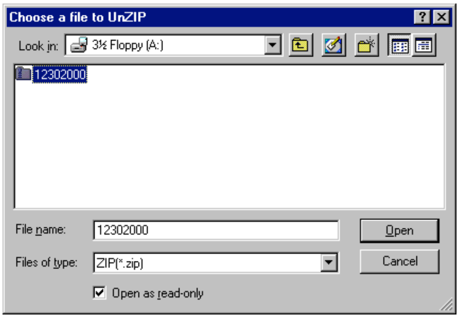
A message will tell you when your data is successfully backed up. For future reference, you should clearly label the diskette(s) with the date and diskette number.

The resulting backup files will be in a highly compressed, industry-standard "ZIP" format. This means that you can use other utilities, such as PKZIP, PC-Tools, WinZip, or Norton, to restore your backup file.

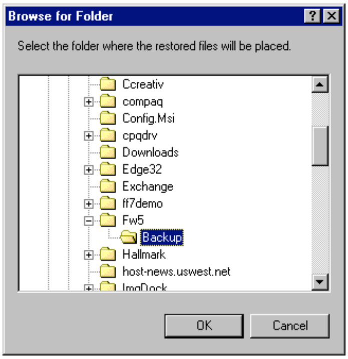
Manual Restore

If you used **Manual Backup** to back up your database, you must use **Manual Restore** to restore it. Place the backup diskette into the drive and click the **Manual Restore** button. If your backup required more than one diskette, insert the *last* disk of the set.

A dialog box will appear; highlight the file you want to restore (unzip), then click **Open**.

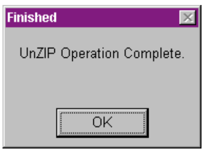


Next, choose the drive and directory where you want to restore the backup file.



When you restore your database manually, you must either restore it to a different location than your current database or change its name. The **Manual Restore** utility has a built-in safeguard that will prevent you from overwriting your current database, even if you select the option to do so. This safeguard lets you alternately open your restored and current databases to compare them if you suspect that you've lost data because of a corrupted database.

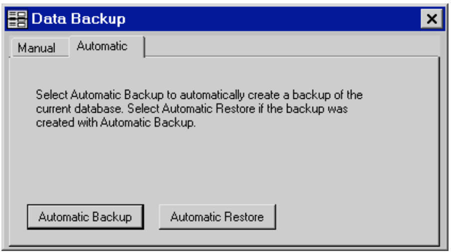
Next, select the folder where you want FaciliWorks to place your restored file. Click **OK** to begin the **Restore** operation. FaciliWorks will tell you when it's complete.



Tip: If your hard drive has been replaced (or if you're installing the software to another computer), you must re-install FaciliWorks first, then restore your database file as a last step.

Automatic Backup/Restore

Use the **Automatic Backup** and **Restore** buttons if you want FaciliWorks to back up and restore your data using the default backup filename (see below) and location (your [A:] drive).



Automatic Backup

Click this button to have FaciliWorks back up your current database (the database that appears at the lower right corner of the Main Menu) to your [A] drive (make sure you insert a blank, pre-formatted diskette into this drive). FaciliWorks will create a backup file that has the same name, but with an extension of "ZIP" (for example, "FWDATA70.ZIP"). If the backup requires more than one diskette, the program will ask you to insert another disk.

The backup file is automatically placed in a directory that uses the date for its name (for example, if you did an **Automatic Backup** on 12/30/2002, the directory name would be 12302002). A text file called "AUTOZIP.TXT" will also be created and placed on your [A] drive.

Important: Do not make any changes to the text file (AUTOZIP.TXT)!

FaciliWorks tells you when your data is successfully backed up. For future reference, you should clearly label the diskette(s) with the date and diskette number.

Automatic Restore

To use **Automatic Restore,** you must use **Automatic Backup** to back up your data. Take the diskette that contains the backup file and place it into your [A:] drive. If your backup required more than one diskette, insert the *last* disk of the set.

When you click this button, FaciliWorks tries to put the database back in the same place from which you backed it up. If a database file with that name already exists in that location, FaciliWorks tries to put the database back into its original folder, in the subdirectory BACKUP. For example, if you originally backed up FWDATA70.MDB, and it was located on C:\PROGRAM FILES\FW7\FWDATA70.MDB, FaciliWorks will try to restore it to C:\PROGRAM FILES\FW6\. However, if another FWDATA70.MDB file already exists in C:\PROGRAM FILES\FW7\, FaciliWorks will place the restored file into C:\PROGRAM FILES\FW7\BACKUP\. If a database file with the same name exists in this directory, too, FaciliWorks will tell you that the file already exists and that you need to use **Manual Restore** to restore the file to a different location.

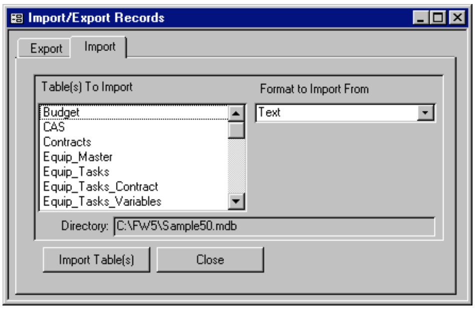
FaciliWorks will tell you when it successfully restores the database, then it will close the **Backup/Restore** screen and ask you if you want to attach to the database that you just extracted.

Import/Export Records

The **Export** utility copies data from FaciliWorks into a new text file or Excel spreadsheet. When you export or import a file, it uses the same directory as your database file. For example, if your export file is 2000125.MDB, and your FaciliWorks database file is in C:\PROGRAM FILES\FW7, then 2000125.MDB will export to C:\PROGRAM FILES\FW7.

The **Export** screen looks like this:

To import data, click on the **Import** tab. The following screen will appear:



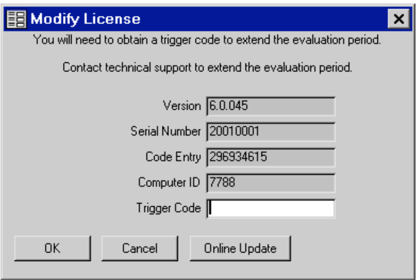
You can import data from the same file formats to which you can export data.

Modify License

Modify License is only used when FaciliWorks' 30-day evaluation period is about to expire, to provide a way for you to continue your license. Seven days before your evaluation period is

over, FaciliWorks will give a message that this period is about to expire. (For your convenience, this period will not expire on a Saturday or a Sunday.) To continue your license, call CyberMetrics Technical Support at (480) 922-7300 for instructions.

The online update allows users who have purchased the product and entered their serial number to remove the demonstration expiration date automatically. If you have done so, make sure you have Internet access on the computer FaciliWorks is installed on, open **Modify License,** and click Online Update. The program will obtain the required information from the web site and remove the demonstration expiration date.

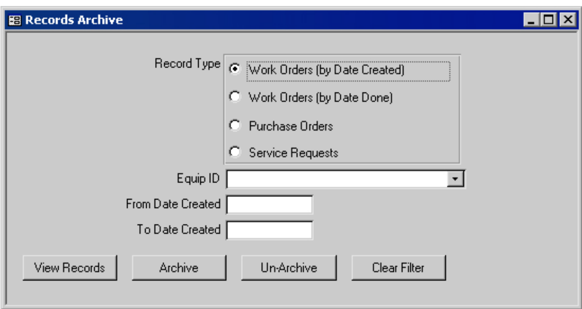


Records Archive

This utility allows you to archive or un-archive your maintenance records and purchase orders according to date. *Archive* will move your records from the current group of records and place them in a storage location within the database. This makes your current group of records smaller, so your database will run faster. An archive is not the same as a backup; a backup preserves your entire database in a separate place, and can be restored if your database is lost or damaged.

Tip: Always make a backup copy of your FWDATA70.MDB file before you archive it!

When you select this feature, the following filter will appear:

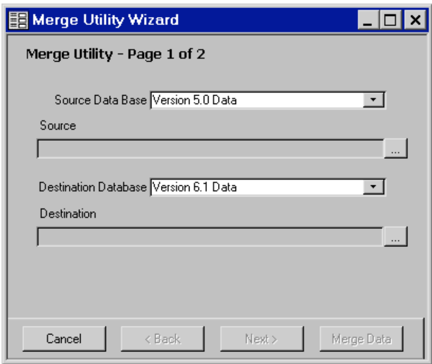


First, select the **Record Type** that you want to archive by clicking the radio button next to the desired record type. You can select two different options for work orders: you can choose to filter by a date range during which the work orders were created, or you can filter by a date range during which the work orders were completed. You can also archive purchase order or service request records.

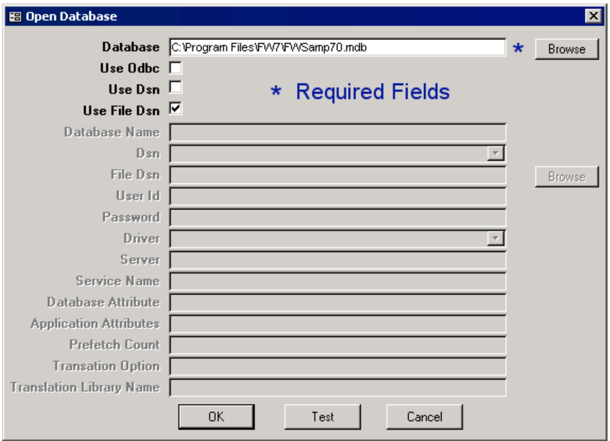
Next, if you want to find records that pertain to a particular piece of equipment, enter or select the equipment ID. Then, enter a date range for records you want to archive. Click the **View Records** button if you want to see the corresponding records. Next, click the **Archive** button to archive the selected records. If you want to re-filter, click the **Clear Filter** button. If you want to un-archive records that you've previously archived, enter the appropriate information in the filter fields, then click the **Un-Archive** button. Click **Close** to exit the filter window.

Merge Utility Wizard

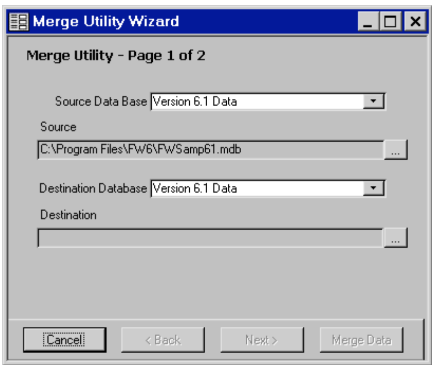
This screen lets you merge data from another FaciliWorks database, Version 5 or 6, into your current database.



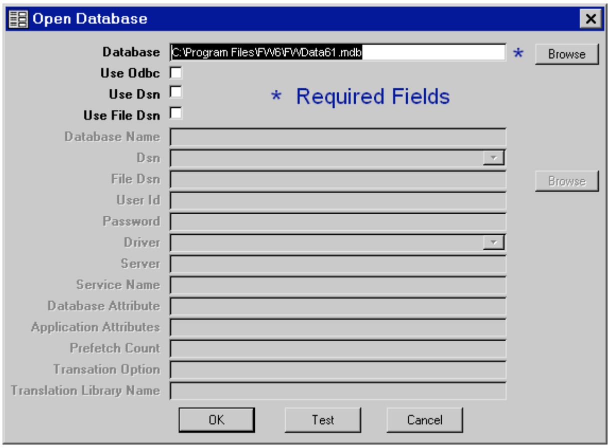
1. Select the version of the database you wish to merge. For example, if you have your data in a FaciliWorks 5 database, select **Version 5.0 Data.** Click the **...** button next to the field labeled **Source;** the **Open Database** window will open.



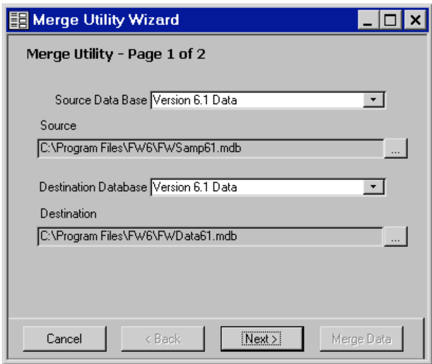
2. Click on the **Browse** button next to the **Database** field to browse to the desired database. Do not check any of the checkboxes below the **Database** field.
3. Once you have selected a database, click **OK** and you will be returned to the Wizard. Now, click on the **...** button next to the field labeled **Destination**; the **Open Database** window will appear again.



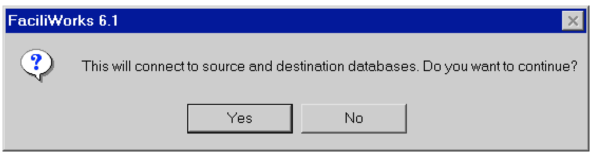
4. Click on the **Browse** button next to the **Database** field to browse to the desired database. This database does not have to be the database that is currently open. Do not check any of the checkboxes below the **Database** field.



5. Once you have selected a database, click **OK** to be returned to the wizard.

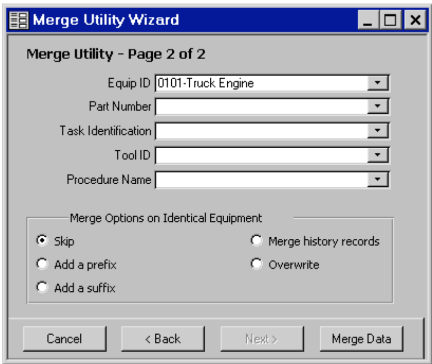


6. Click **Next** to attach the databases. The following dialog box will appear:



7. Click **Yes**; FaciliWorks will attach the databases. This process may take a few minutes; when it is finished, this filter form will appear:

8. You can use this filter to select a particular piece of equipment, part, task, tool, or procedure to merge, if you do not need to use all of the information from the other database. If you leave all fields empty, FaciliWorks will merge all the information from the other database into the current database.



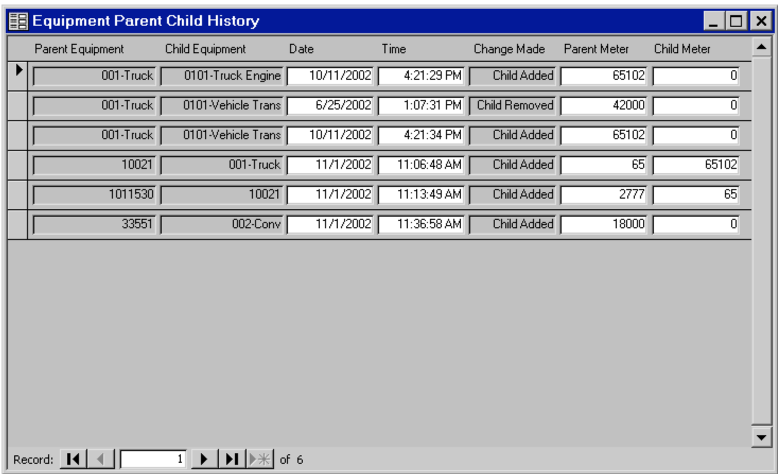
9. Choose an option under **Merge Options on Identical Equipment** according to your needs:
   a. Choose **Skip** to ignore identical records from the database being merged
   b. Choose **Add a prefix** to place additional characters at the beginning of the record name so you can distinguish newly merged records from your original records. If you choose this option, a field will appear for you to fill in the desired prefix.
   c. Choose **Add a suffix** to place additional characters at the end of the record name so you can distinguish newly merged records from your original records. If you choose this option, a field will appear for you to fill in the desired prefix.

d. Choose **Merge history records** to merge historical data from newly merged records into the corresponding records in your original database.
e. Choose **Overwrite** to replace your original records with the corresponding records in the newly merged database.

10. Click on the Merge Data button to merge the specified data into the selected database. This process may take a few minutes.
11. You can continue to filter and merge data from the selected database by repeating steps 8-10. You can merge data from a different database by closing Merge Utility Wizard and repeating steps 5-10. If you have finished merging data, close the Merge Utility Wizard and Open Database forms to return to Utilities and Data Tools.

Equipment Parent Child History

This utility displays a comprehensive history of the parent-child relationships of the equipment in a database. Each record lists the respective equipment IDs for both parent and child equipment, the date and time a change was made to the child equipment’s status, whether the child equipment was added or removed, and the respective meter readings for both parent and child equipment.

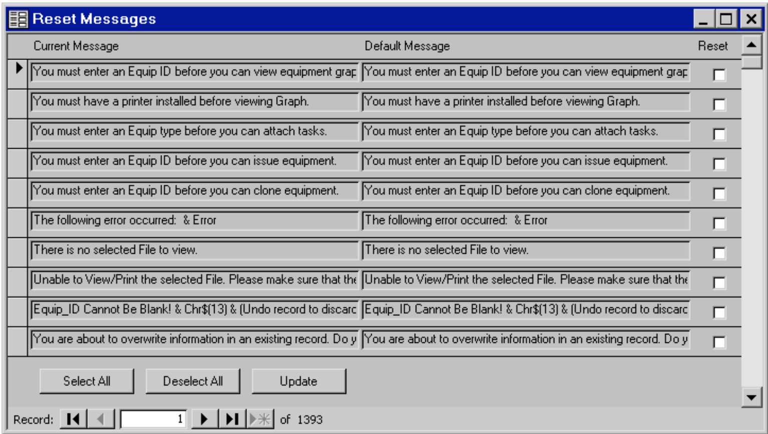

Equipment Parent Child History

Parent Equipment	Child Equipment	Date	Time	Change Made	Parent Meter	Child Meter
001-Truck	0101-Truck Engine	10/11/2002	4:21:29 PM	Child Added	65102	0
001-Truck	0101-Vehicle Trans	6/25/2002	1:07:31 PM	Child Removed	42000	0
001-Truck	0101-Vehicle Trans	10/11/2002	4:21:34 PM	Child Added	65102	0
10021	001-Truck	11/1/2002	11:06:48 AM	Child Added	65	65102
1011530	10021	11/1/2002	11:13:49 AM	Child Added	2777	65
33551	002-Conv	11/1/2002	11:36:58 AM	Child Added	18000	0

Record: 1 of 6

Reset Messages

This utility lets you restore the original text of any message in FaciliWorks. This is used if the user has edited the message text and desires to start over from the beginning.



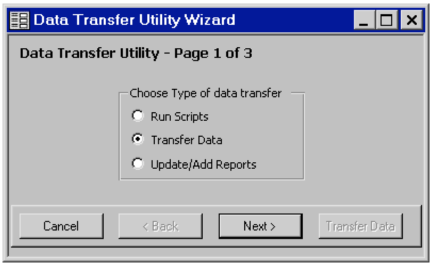
FaciliWorks displays the current text of the message in the left-hand column of this window, and the default text in the right-hand column. To restore messages to their default text, check the **Reset** checkbox next to the messages you want to restore, then click on the **Update** button. Click on the **Select All** button if you want to check the **Reset** checkbox beside every message; click on **Deselect All** to uncheck every checkbox.

Data Transfer Utility Wizard

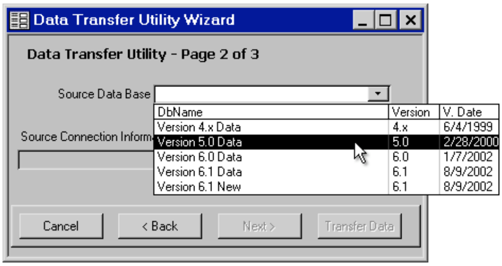
The Data Transfer Utility Wizard has three purposes. The first is to transfer your existing data from previous versions of FaciliWorks. The second is to allow you to run scripts to create an MS SQL or Oracle database (available if you have purchased that option). The third purpose is to fill a new MS SQL or Oracle database with the default data that FaciliWorks requires.

The Data Utility Wizard is a separate application; to use it, go to the Windows **Start** menu and select **Start | Programs | FaciliWorks 7 | Data Transfer Utility.**

To Transfer Data From a Previous Version:

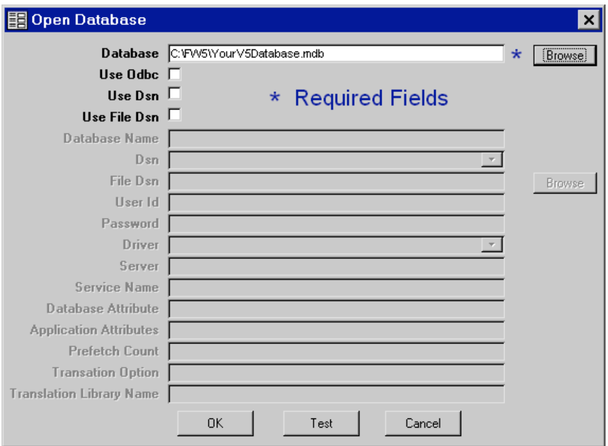


Make sure **Transfer Data** is selected and click **Next**.

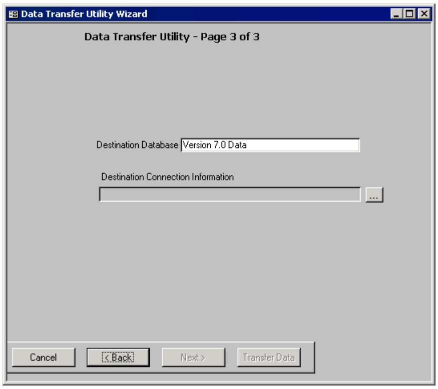


Select the version of your previous database. For example, if you have your data in a FaciliWorks 5 database, select **Version 5.0 Data.** Click the **...** button next to the field labeled **Source Connection Information;** the **Open Database** window will open.

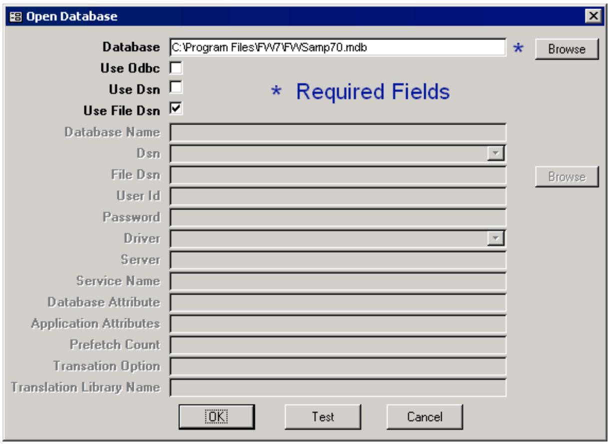
Click on the **Browse** button to browse to your source database.



Once you have done so, click **OK** and you will be returned to the Wizard. Click **Next** to go to the next step.



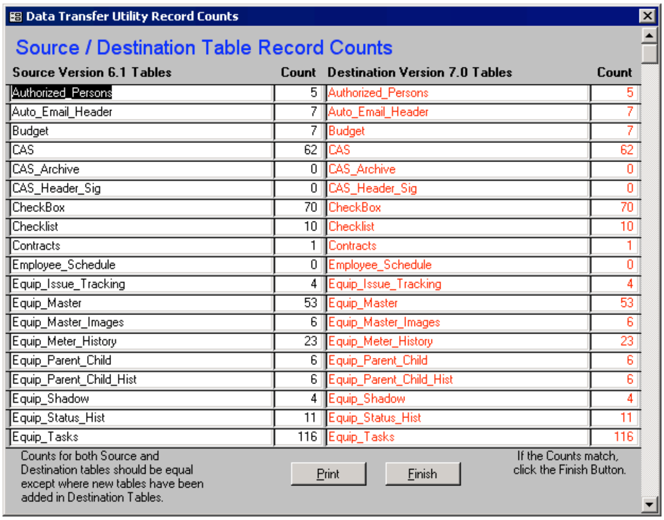
Click the **...** button next to the field labeled **Source Connection Information.** A second **Open Database** window will open. Click on the **Browse** button to browse to your destination database.



Once you have done so, click **OK** and you will be returned to the Wizard. Click **Transfer Data**.

Next a message will appear, warning you that all data in the database that you selected as the destination database will be deleted. If you are sure that there is no data in this database that you will need, click **OK**. If not, click Cancel and select a different database for the destination database.

Once the data transfer is complete, a window will open to give you a side-by-side comparison of the records in the source and destination databases.



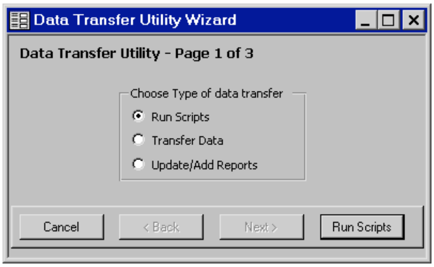
Source Version 6.1 Tables	Count	Destination Version 7.0 Tables	Count
Authorized_Persons	5	Authorized_Persons	5
Auto_Email_Header	7	Auto_Email_Header	7
Budget	7	Budget	7
CAS	62	CAS	62
CAS_Archive	0	CAS_Archive	0
CAS_Header_Sig	0	CAS_Header_Sig	0
CheckBox	70	CheckBox	70
Checklist	10	Checklist	10
Contracts	1	Contracts	1
Employee_Schedule	0	Employee_Schedule	0
Equip_Issue_Tracking	4	Equip_Issue_Tracking	4
Equip_Master	53	Equip_Master	53
Equip_Master_Images	6	Equip_Master_Images	6
Equip_Meter_History	23	Equip_Meter_History	23
Equip_Parent_Child	6	Equip_Parent_Child	6
Equip_Parent_Child_Hist	6	Equip_Parent_Child_Hist	6
Equip_Shadow	4	Equip_Shadow	4
Equip_Status_Hist	11	Equip_Status_Hist	11
Equip_Tasks	116	Equip_Tasks	116

If there is a table listed on the left-hand side, the number of records on the right-hand side should be the same or greater than the number of records on the left side. If the left-hand side says only **(New Table)**, then this is a table that has been added to FaciliWorks 7 and you do not need to check the record counts. If the record count of any of the tables in the right-hand column is less than the corresponding record count in the left-hand column, contact Technical Support for assistance. If there is no discrepancy, click **Finish**.

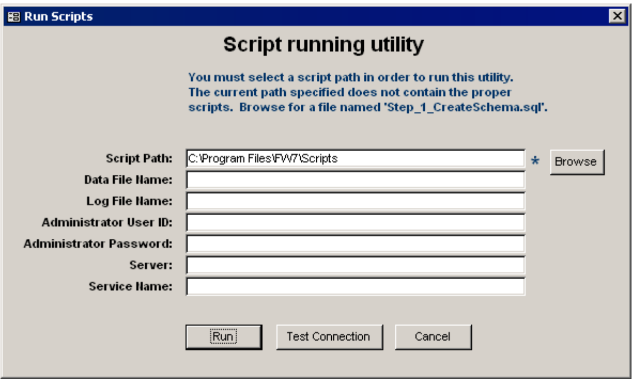
You will then need to restore your connection. The **Open Database** window should already show the connection information from your destination database. If so, click **OK**. If not, change the information as required and click **OK**.

Run Scripts

If you're using a client/server version of FaciliWorks, you must run the scripts before you transfer your data. To do so, run the Data Transfer Utility Wizard. In the first window, make sure the **Run Scripts** radio button under **Choose Type of data transfer** is selected as shown:



Click on the **Run Scripts** button; this window appears:

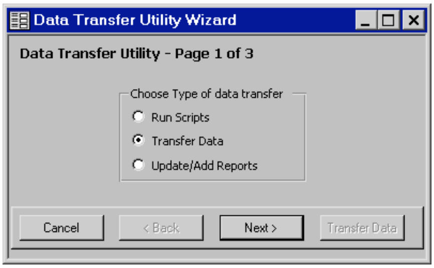


The fields and buttons in this screen are explained in this table:

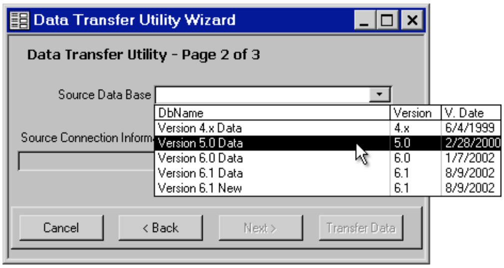
Field/Button Name	Description
Script Path **and** Browse	This field contains the location of the "Scripts" file for the current workstation (scripts are used to set up the database and tables). It defaults to the same path that the DTU is in for the current workstation. However, if this path is incorrect, you'll see a message similar to the one shown above. If the path is incorrect, click the *Browse* button to navigate to the directory where the "Scripts" file is located.
Data File Name	Enter the name and location on the server where the FaciliWorks 5 data file is located. The letter for the drive must be its physical drive letter, not a mapped letter. For example, if your server has a physical drive – D – that's mapped to as a different letter – F, enter D, followed by the rest of the path.
Log File Name (MS SQL only)	MS SQL users should enter the name and location on the server where the log file will be stored. We recommend that you use the same path as for the data file (again, using the drive letter of the physical drive).
Administrator User ID **and** Password	In these fields, enter the user name of your Oracle or MS SQL administrator, then enter the administrator's password.
Server (MS SQL only)	MS SQL users must enter the name of the server in this field. For example, if the server's name is "Company_NT", enter that name in this field.
Service Name (Oracle only)	Oracle users must enter the name of the service that the database will be installed on; you create this name when you configure Oracle on the server.
Run	When you're finished entering all of the necessary information, click this button to run the scripts.
Test Connection	Click this button to make sure that you're connected to the correct path before you run the scripts.
Cancel	To exit this screen without running the scripts, click *Cancel* to return to the main **DTU** screen.

Once the scripts have run, you will need to fill the created database with the default data required by FaciliWorks.

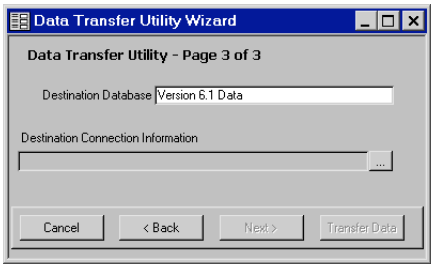
To Fill a New MS SQL with Default Data



Make sure **Transfer Data** is selected and click **Next**.

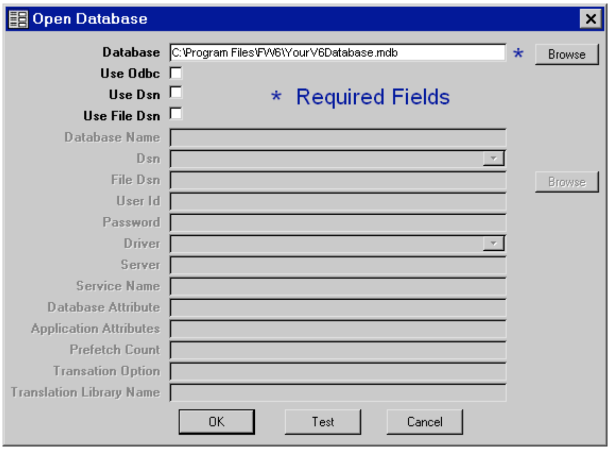


Select **FaciliWorks 7.0 New** and click **Next**.



Click the **...** button next to the field labeled **Source Connection Information**. The **Open Database** window will open.

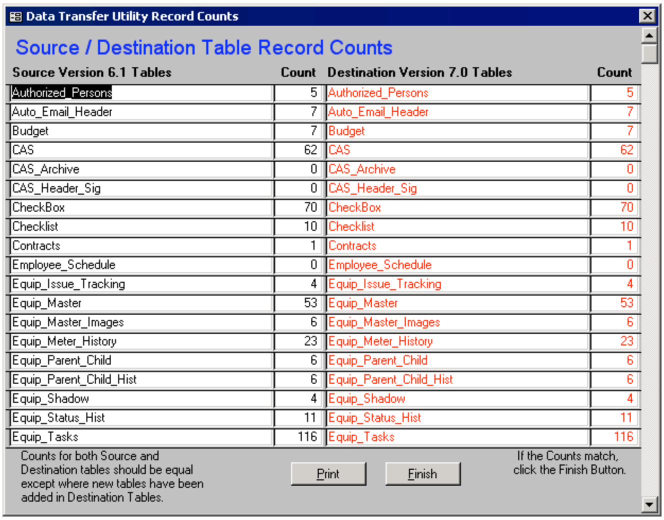
Click on the **Browse** button to browse to your destination database.



Once you have done so, click **OK** and you will be returned to the Wizard. Click **Transfer Data**.

Next a message will appear, warning you that all data in the database that you selected as the destination database will be deleted. If you are sure that there is no data in this database that you will need, click **OK**. If not, click **Cancel** and select a different database for the destination database.

Once the data transfer is complete, a window will open to give you a side-by-side comparison of the records in the source and destination databases.

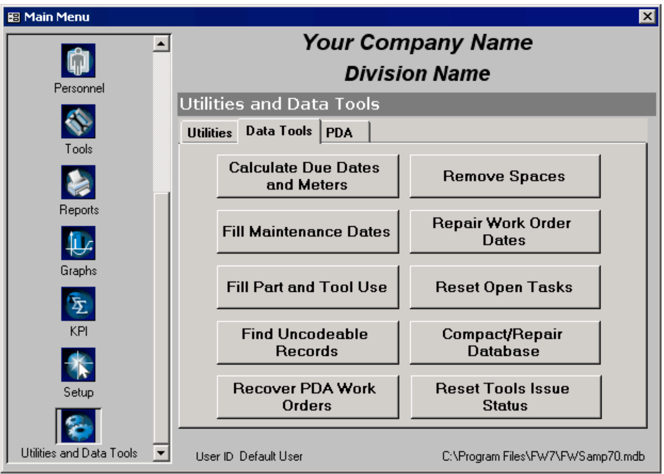


If there is a table listed on the left-hand side, the number of records on the right-hand side should be the same or greater than the number of records on the left side. If the left-hand side says only **(New Table)**, then this is a table that has been added to FaciliWorks 7 and you do not need to check the record counts. If the record count of any of the tables in the right-hand column is less than the corresponding record count in the left-hand column, contact Technical Support for assistance. If there is no discrepancy, click **Finish**.

You will then need to restore your connection. The **Open Database** window should already show the connection information from your destination database. If so, click **OK**. If not, change the information as required and click **OK**.

Chapter 9: Data Tools

The **Data Tools** menu contains utilities that are intended for one-time use. Use these features only when instructed to do so by Technical Support or FaciliWorks documentation (such as manuals or update notices).

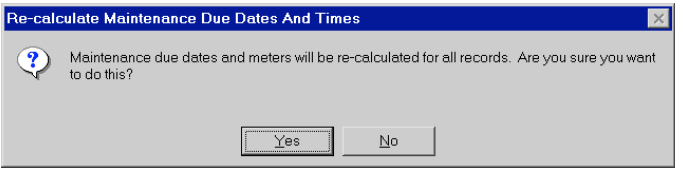


Calculate Due Dates and Meters

This utility re-calculates all maintenance due dates. For example, if you change the maintenance frequency for punch presses from 60 days to 90 days, and you have 25 punch

press records, it would be easier to update the due dates by running this utility than to manually click the **Calc** button in **Equipment Entry** for all 25 records.

When you select this option, you'll see this warning:



This utility uses the last maintenance date and the maintenance frequency to calculate the next due date. It will make the **Next Due Date** field blank for any equipment records for which you base the next due date on meter.

Fill Maintenance Dates

You need to use the **Fill Maintenance Dates** utility if you are upgrading to FaciliWorks Version 6 from ForeSight Version 3.11 or lower. This utility fills in any missing dates for completed work orders. For emergency work orders, FaciliWorks makes both the **Maint. Due** and **Maint. Done** dates the same as the date on which you created the work order. For regular work orders, the program assigns these fields a date of one week after the creation of the work order.

Fill Part and Tool Use

Each part and tool record contains a screen called **"Where Used".** In this tab, you can see a list of equipment that has work orders that used this particular part or tool. You can fill in the information in this screen yourself, or you can click on the **Fill from Work Orders** button in each record to complete the information for that individual record. However, you can also use the **Fill Part and Tool Use** utility to fill in all of your part and tool records with the **Where Used** information from all non-archived, completed work orders.

Find Uncodeable Records

In FaciliWorks, you can print bar codes for parts, tools, employees, and equipment. Run the **Find Uncodeable Records** utility to check all of your part numbers, tool IDs, employee IDs, and equipment IDs to see if any of them contain characters that can't be made into a bar code. If the utility finds any uncodeable records, it will list them and let you print a report of them. If no uncodeable records are found, a dialog box will appear to confirm this.

Recover PDA Work Orders

When you export a work order to the PDA, you will not be able to view that work order in FaciliWorks until you import your work orders back into FaciliWorks. If, for some reason, you can't import work orders from the PDA, run this utility to see those exported work orders.

For more information, please refer to the *FaciliWorks PDA Software User's Guide*.

Note: If you run this utility, you cannot import the work orders from the PDA; therefore, try to import your data from the PDA before running this utility.

Remove Spaces

You should run this utility *once* after you import data from another program. This feature removes unnecessary trailing spaces that may have been used by your old program and were then imported into FaciliWorks.

Note: This utility is not the same as the utility executed by Compact/Repair Database. The Compact/Repair Data does not remove any *spaces*; instead, it removes old, deleted *records* that are no longer needed.

Repair Work Order Dates

This utility checks all of your work order records for valid dates and times. If a record is missing one of these fields, the program will insert the required information. You can also use this utility if you double-click in a work order date field and both the date and time are inserted, instead of just the date (it removes the time from these date fields).

Reset Open Tasks

Use this utility to update the **Open Work Order** checkbox in all of your **Equipment Entry–Task** records. You can also change this field in your individual **Equipment Entry** records.

Compact/Repair Database

Whenever you delete a record, the record is not *actually* deleted—it's just marked as deleted and the location it occupies is re-used whenever you add new records (that is, the data file size does not decrease). If you delete many records, you may want to compact your data file so that all the records marked as deleted are actually deleted, and the data file is reduced in

size. You can do this by selecting **Compact/Repair Database** from the **Data Tools** menu. If necessary, this utility will also repair the database before compacting it.

Reset Tools Issue Status

This tool corrects problems with imported records that show that a tool has been received even though it has not been issued. Do not run this tool unless instructed to do so by Technical Support.

Utilities and Data Tools—PDA

For information on utilities used with FaciliWorks PDA Software, please refer to the *FaciliWorks PDA Software User's Guide*.

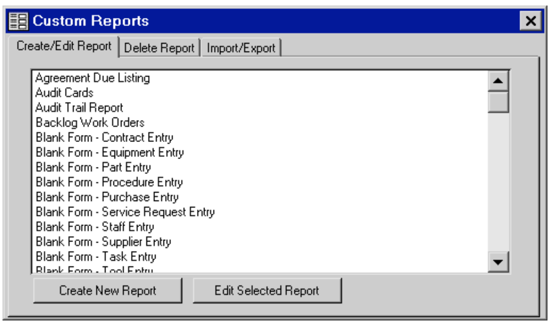
Chapter 10: Customizing Reports

FaciliWorks 7 now offers the ability to manipulate your reports. You can create new reports or edit existing ones, import reports from other compatible databases, or export them. Reports that are no longer in use can be deleted from your list.

The report editor design environment describes how to add and modify controls in your report. It includes detailed descriptions of report editor user interface elements, including menus and toolbar items and preference settings. In addition, you will learn about some basic operations while using the report editor, such as selecting and moving, formatting and aligning controls in your report.

Using Custom Reports

Custom Reports is a new utility in the **Setup** section of FaciliWorks 7. To start, click on the **Custom Reports** button; the window below will appear:



Create/Edit Report

The **Create/Edit Report** tab displays a list of all available reports. From this tab, you can open the report editor in one of two ways: you can select the title of a report in the listing and click the **Edit Selected Report** button to open the selected report for editing, or you can click **Create New Report** to create a report completely from scratch.

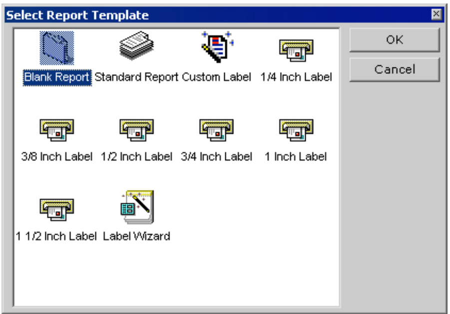
For you to better understand the report editor canvas, we'll start with a blank report and discuss each of the elements of the canvas.

Creating a New Report

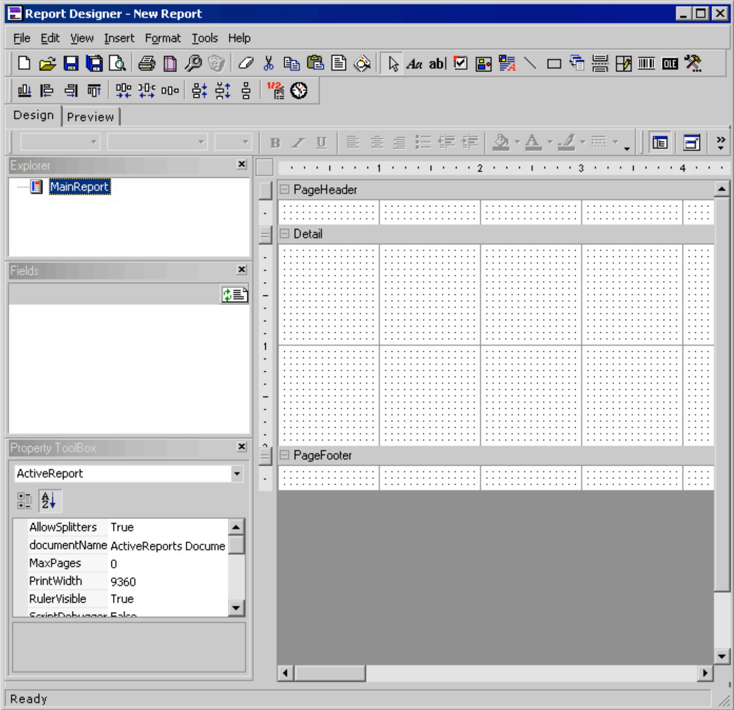
FaciliWorks 7's report editor comes with templates to help you build reports. If you have a label printer, using the most common label formats will fast-track your label design. You may also use the Label Wizard to develop new label designs quickly.

The report editor screen is common to all the templates. For our purposes, we will base our discussion on a basic blank report and build as we move along.

When you click the **Create New Report** button, the window below will appear:



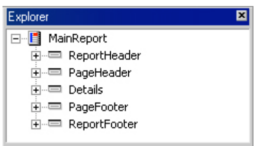
Select **Blank Report** and click on the **OK** button.

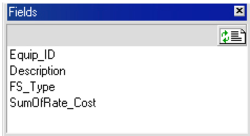
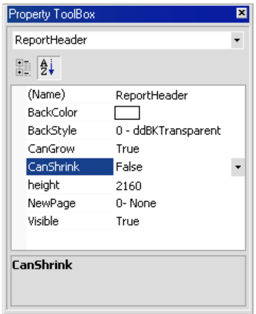
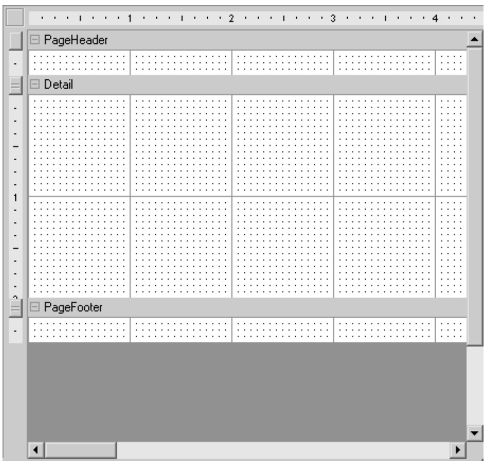


User Interface

By default, the editor window is divided into four parts: **Explorer** (or **Objects**), **Report Fields, Properties** and the designer canvas.

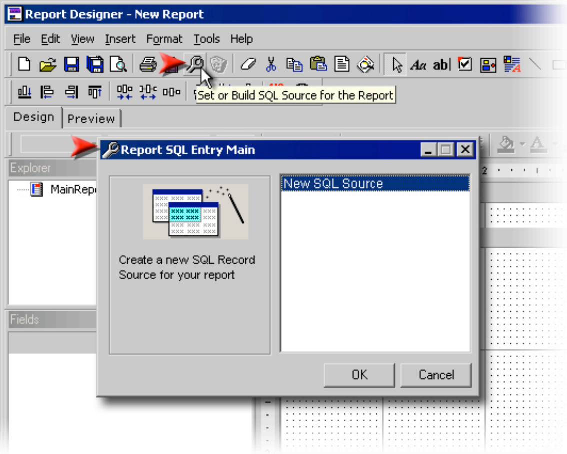
Frame Title	Description
Explorer	This frame shows you a tree diagram of the parts of your report design. The items in this frame represent objects in your report; click on any item to display its properties in the Property Toolbox..



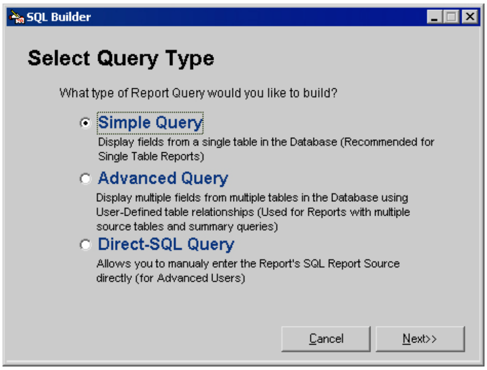
Frame Title	Description
Report Fields	If you have established a database connection, all available fields will appear in this frame. You can then select any field and it to the designer canvas on the right. 
Property Toolbox	This frame lists the properties of the object currently selected in the Explorer frame. The properties displayed vary depending on the object selected. 
Designers Canvas	The canvas can be divided in different parts. The example shows a page header, the details section and page footer. After building your format, you can preview the outcome by selecting the **Preview** tab. 

Opening a Data Source

When you create a report, you must first connect to a data source. The fields for your report will come from this data source. On the toolbar, select the button labeled **Set or Build SQL Source for the Report** as shown:



The **Report SQL Entry Main** window will appear as shown, with **New SQL Source** selected. This is the only way you can make a connection to a data source, so you must click **OK** to proceed. The SQL Builder dialog box appears, giving you three types of queries to choose from.



The first two selections use a query wizard to guide you easily through the process. For the third selection, you must know the syntax used to create SQL commands.

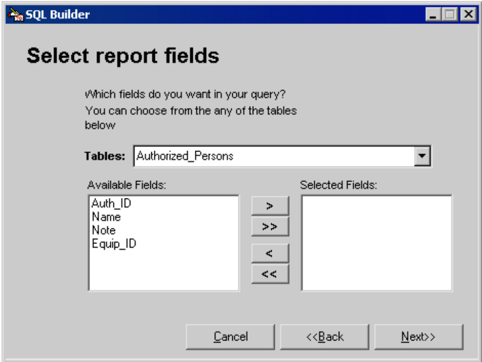
Simple Query

If you only have one data source—that is, only one table to use for your report—use **Simple Query.** First, identify the table to use as data source. To do this, click on the drop-down button

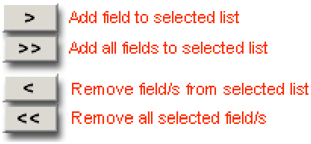
on the right-hand side of the tables field and select from the list of all available tables in your database, or type the table name directly into the field if you already know it.

Selecting a table and choosing fields

When a table has been selected, the list of available fields for the table will appear on the **Available Fields** list box. You can now select the fields you want to appear in your report by highlighting the fields. You can select more than one field at a time. Unselect by clicking on the field name again.



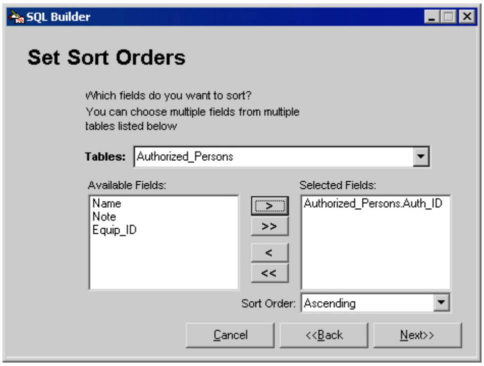
Now click on the selection buttons between the listing fields to move the fields you have highlighted to the **Selected Fields** drop-down list to the right. This places the fields in your report.



When you are satisfied with your selection, click on the **Next** button.

Setting sort order

Repeat this process to select the fields that will define the sort order for your report in the next window.



You can, however, choose not to apply any particular order on your records; if you do so, your report will display them as they appear in your original records. Click on the **Next** button and view the SQL statement summary on the next window.

The SQL statement

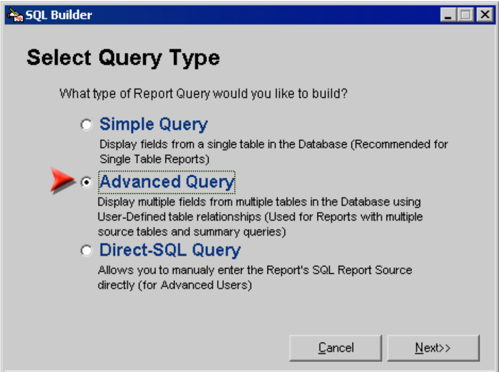
This text box contains the actual SQL statement the program will use to get the data source for your report.

You can modify the query by editing the text in this window, if you know the right syntax for creating SQL statements; however, if you do not do this correctly, an error message will appear. We recommend that users *do not* edit the SQL statement displayed in this window.

When you are done, click on the **Finish** button.

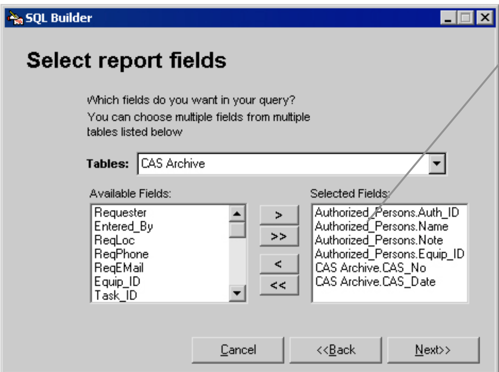
Advanced Query

When creating reports using multiple tables, use this query type. You will be able to use the fields from different tables you select; the tables are connected by links you create or specify. It is very important that you know the structure of your tables and the types of the fields in these tables. You cannot create links using two different kinds of fields (e.g., a text field displaying the equiupment ID number cannot be linked to a date field showing the maintenance date). These linked fields should be common to both tables. If you are not sure about this, ask your database administrator about the properties of your tables. In the **Select Query Type** window, select the **Advance Query** button and click on **Next**.



Selecting tables and fields

Go through step 2 just as you did with **Simple Query** in selecting your table name and field names. Once you have selecting fields from one table, you can choose another table and add fields from that table to your **Selected Fields** list.



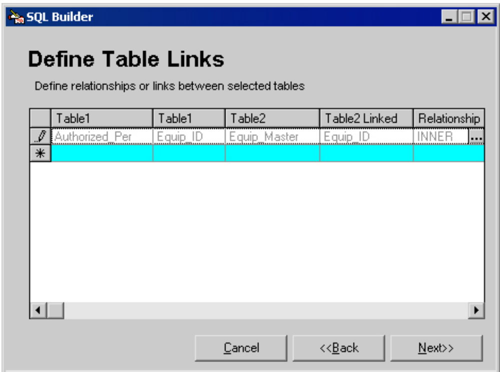
In the field listing, the string of characters before the period indicates the table name, after, the field name. Take note here that you have two different tables for the field list: **Authorized_Persons** and **CAS_Archives.**

Fields that you will use to link your tables need not be included in the **Selected Fields** list. It is suggested though, that you link fields coming from the table where all the records are to

be included in the report. For example, you have a table of equipment records which does not include details of each piece of equipment and another table listing the details for all the equipment. For a certain period of time not all equipment records are to be included in the filtered table. If you want a report that will include all the filtered equipment with its corresponding descriptions, you will need the two tables, linked on, for instance, the equipment ID. In this case, not all descriptions will be used.

Establishing Table Links

After selecting your report fields from different tables, you should now establish the link or links between the tables so as to keep information on a specific record together. Define these links by specifying the tables and the fields that will be linked and the type of link to use.



You link two tables at a time through their common field (it is not necessary that the fields have the same name; it is necessary that they be of the same type: e.g. EquipID and Equip_ID).

The table and linked fields have drop-down lists limited to your selected table and the fields of the table. A relationship selection window is also provided to guide you.

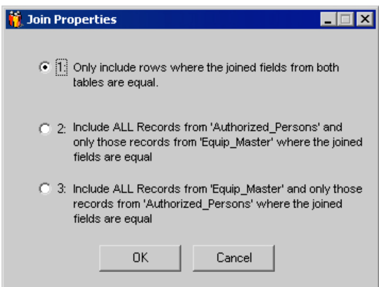


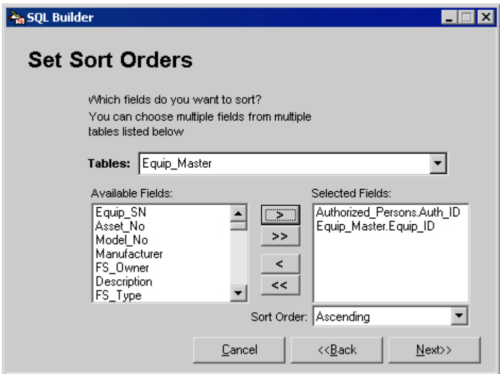
Table link fields

Field Name	Description
Table 1	Name of the table in which all its records are to be reflected in the report. "All records" may mean all records subjected to filter, if any.

	Links may also act as filters. This field has a drop-down list.
Table 1 Linked Field	This is a field common in type and contents between the two linked tables. The names and field sizes may vary but it will only link with exactly the same record. This field has a drop-down list.
Table 2	Name of the table linked with Table 1. Not all its records (even if subjected to filter) will be included in the report.
Table 2 Linked Field	Same description as *Table 1 Linked Field*.
Relationship	There are three types of relationship as described in the illustration. It is a good practice to use the convensions described for *Table 1* and *Table 2* above, but these two tables can actually be interchanged as described in selection 2 and 3 of the joined properties option.

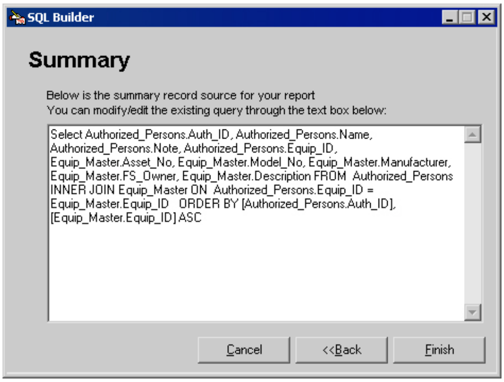
Setting data sort order

To set the order or arrangement of data in your report, you now have to specify which table and what field will determine this order. You are not limited to one table and one field, since you are dealing with multiple tables.



You must also set the sort order to *Ascending* or *Descending*.

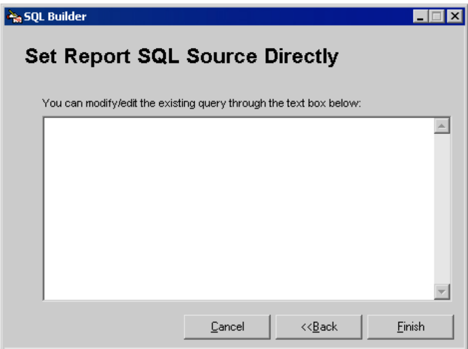
The following summary screen will show you the actual SQL statement that will be used to open your data source.



Direct-SQL Query

Advanced users can directly enter the SQL statement using this third type of query preparation. It is assumed that you know the full syntax for creating SQL statements. We have, however, included the basics for creating SQL statements or statement structure to help you get started.

Clicking on the **Next** button will give you a window with a blank input field as shown below:



Report Editor uses the Microsoft Jet database engine —a database management system that stores and retrieves data in user and system databases. The Microsoft Jet database engine can be thought of as a data manager component with which other data access systems, such as Microsoft Access and Visual Basic, are built.

The `SELECT-SQL` statement is used to set up your data source. A brief syntax explanation is shown below as a refresher. It instructs the Microsoft Jet database engine to return information from the database as a set of records.

Syntax

```
SELECT [predicate] { * | table.* | [table.]field1 [AS alias1] [,
[table.]field2 [AS alias2] [, ...]]}
FROM tableexpression [, ...] [IN externaldatabase]
[WHERE... ]
[GROUP BY... ]
[HAVING... ]
[ORDER BY... ]
[WITH OWNERACCESS OPTION]
```

The `SELECT` statement has these parts:

Part ***Description***

Part Name	Description
predicate	One of the following predicates: **ALL, DISTINCT, DISTINCTROW**, or **TOP**. Use the predicate to restrict the number of records returned; if none is specified, the default is **ALL**.
*	Specifies that all fields from the specified table or tables are selected.
table	The name of the table containing the fields from which records are selected.
field1, field2	The names of the fields containing the data you want to retrieve. If you include more than one field, they are retrieved in the order listed.
alias1, alias2	The names used as column headers instead of the original column names in the table.
tableexpression	The name of the table or tables containing the data you want to retrieve.
externaldatabase	The name of the database containing the tables in **tableexpression,** if they are not in the current database.

Remarks

To perform this operation, the Microsoft Jet database engine searches the specified table or tables, extracts the chosen columns, selects rows that meet the criterion, and sorts or groups the resulting rows into the order specified.

The minimum syntax for a SELECT statement is:

```
SELECT fields FROM table
```

You can use an asterisk (*) to select all fields in a table. The following example selects all of the fields in the Suppliers table:

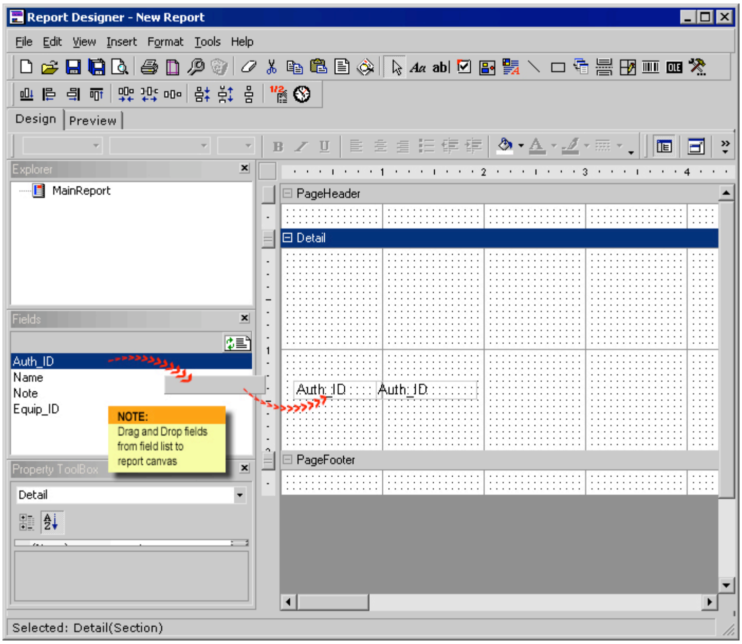
```
SELECT * FROM Suppliers;
```

If a field name is included in more than one table in the FROM clause, precede it with the table name and the . (dot) operator. In the following example, the Department field is in both the Employees table and the Supervisors table. The SQL statement selects departments from the Employees table and supervisor names from the Supervisors table:

```
SELECT Employees.Department, Supervisors.SupvName
FROM Employees INNER JOIN Supervisors
WHERE Employees.Department = Supervisors.Department;
```

Creating Your Layout

Now that you have provided a source for your report you can now start creating your layout. Take note that the **Fields** frame is no longer empty. It now contains a list of fields that you can drag and drop onto your report canvas.



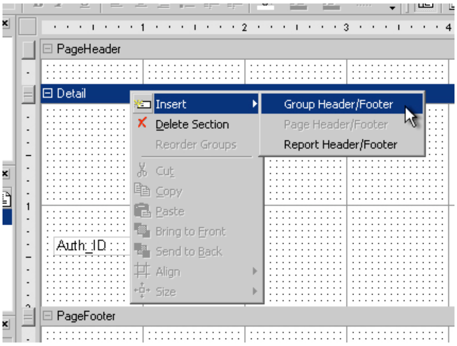
You can drag as many fields as you can put into your canvas, but remember that the canvas working area is the actual edge-to-edge size of your printing paper. Also, the top of the **Page Header** and the buttom of the **Page Footer** mark the upper and lower edges of your paper. You can move the blue markers on the ruler bar to your desired edge margin; this will be marked by the red dotted line running from the top to the buttom of the page.

The basic report format has three sections: **Page Header**, **Details** and **Page Footer**. The **Header** and **Footer** page is repeated all throughout the report while **Details** contains the body of the report.

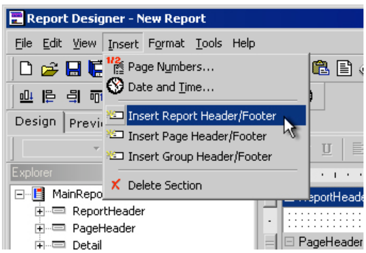
Grouping Your Data

Some reports require grouping of data – common record information is printed on one row and rows below include other varying details of the records. For example, in creating a report on tasks performed on equipment, a group header would contain the ID number of the equipment and the rows beneath would contain the type of tasks performed on the particular piece of equipment.

To create a group, right-click anywhere in the designer canvas and select **Insert Group Header/Footer** from the popup menu.

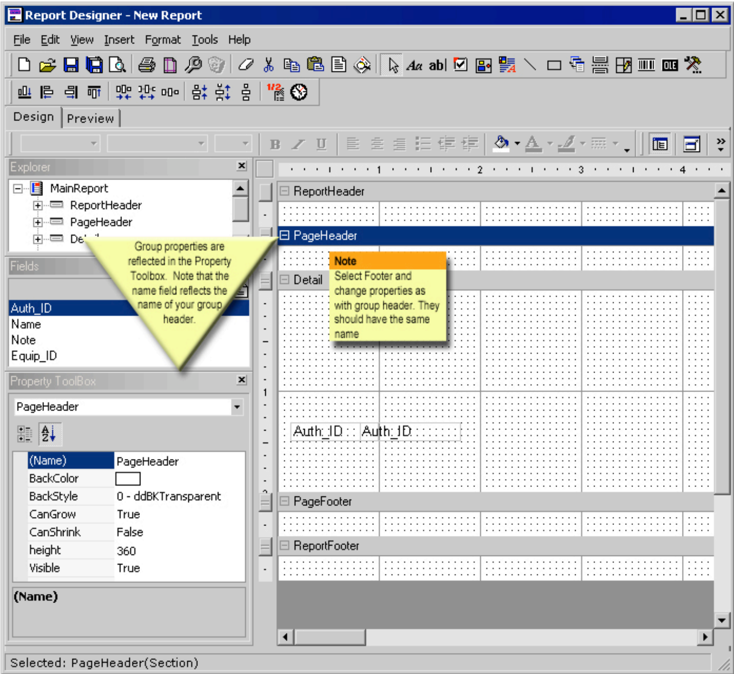


You can also use the **Insert** menu from the Main Menu bar and select **Insert Report Header/Footer.**



A new section on the canvas will appear – a group header and a corresponding group footer, appropriately labeled.

The name and other properties of the group can be changed in the properties frame on the left, after selecting the Data Field you will group on. If you know the name of the field, you can type it directly in the field, or choose from the drop-down list of available fields. It is also advisable to change the group header and corresponding group footer name to the name of the field you group on. This change will be reflected in the header and footer names on the canvas. You can add as many groups as you wish.

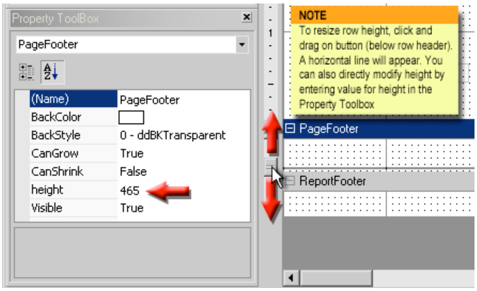


To add a field to your group, just drag and drop the field from the **Fields** frame. Just make sure that you include the field defining the group. The information on the fields that you put here will be only of the first record for the particular group.

Creating the Details

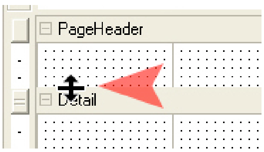
As mentioned above, you can drag and drop as many fields as you can fit in the Detail section of your report. You can keep them in a single row or make multiple rows for each record. You can modify the row height by dragging the button to the left of the row header below the Detail section up or down.

You can also directly change the row height by entering a value in the **Height** property in the **Properties-Details** frame. The unit used in the program is the twip. There are 20 twips per printer's point, or 1440 per inch.



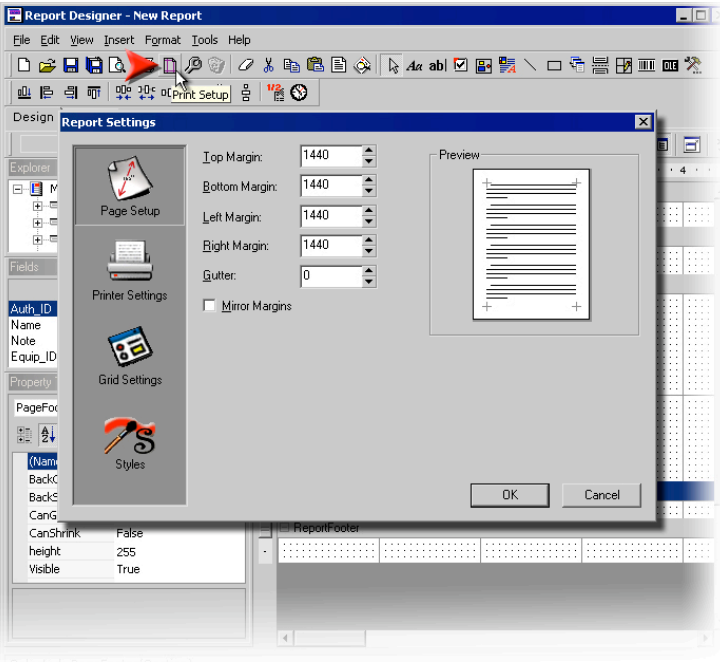
TWIP
By default, all movement, sizing, and graphical-drawing statements use a unit of one **twip**. A twip is 1/20 of a printer's point (1,440 twips equal one inch, and 567 twips equal one centimeter). These measurements designate the size an object will be when printed. Actual physical distances on the screen vary according to the monitor size.

A third way of resizing the row height is by putting the cursor on the bottom of the row you wish to resize. The cursor will change to look like this: 



Report Settings

Report Settings lets you set margins, printer settings, grid settings and styles used in building our reports. From the main icon bar, select the **Report Setup** button to open the **Report Settings** window.



Converting from Inches or Centimeter to Twips

INCHES

Margin = 1440 x n

CENTIMETERS

Margin = 567 x n

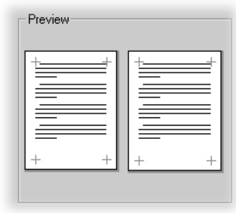
Where *n* is your desired margin in inches or centimeters

Page Setup

The margin is the nonprinting area outside the main body of your report; by default, margins in the report editor are set to 1440 twips (1 inch) all around. If you prefer a wider or narrower margin, click on the up or down arrow next to the field (**Top Margin, Bottom Margin, Left Margin,** or **Right Margin**) you wish to adjust. Clicking on the up arrow will add 360 twips, or _", to the width of the margin; clicking on the down arrow will subtract a similar amount from the width of the margin. You may also enter a value manually; if you want a 5/8" bottom margin, for instance, multiply 1440 twips/inch by .625". Enter the resulting value, 900, in the **Bottom Margin** field.

The gutter is an additional area you can add to your inside margin width, increasing the nonprinting area of your document. (If you expect to print reports that will be bound in a ring binder, you might want to add a gutter of _" to _" to allow for holes to be punched.) Click on the up or down arrows to increment this value by 360 twips (_") or enter a value manually as desired.

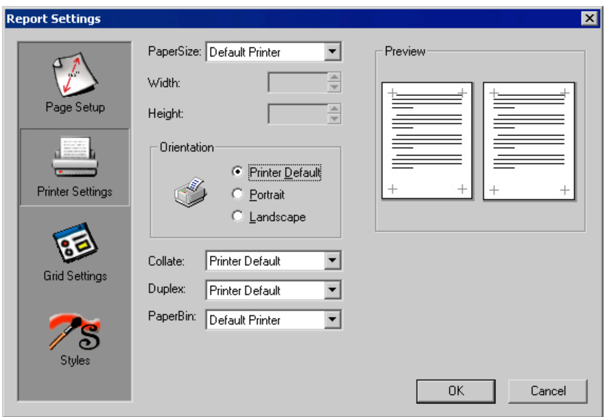
If you are printing on the front and the back of a page and your left and right margins are different (or if you have added a gutter to your pages), you will probably want to check the **Mirror Margins** checkbox. Checking this box automatically sets your margins so that the inside margins of facing pages are the same, and the outside margins as well, just as if they were reflected in a mirror. (When you check this box, the margin display changes from a single right-hand page to two facing pages with mirrored margins.)



Printer Settings

By default the program follows the default settings of the printer. These settings can be found in the **Properties** setting of the printer in the Windows printer setup. For your convenience, we have added a facility within the report editor to modify these settings to suit your report.

To access **Printer Settings,** select the **Printer Settings** icon in **Report Settings.** The window shown below will appear:



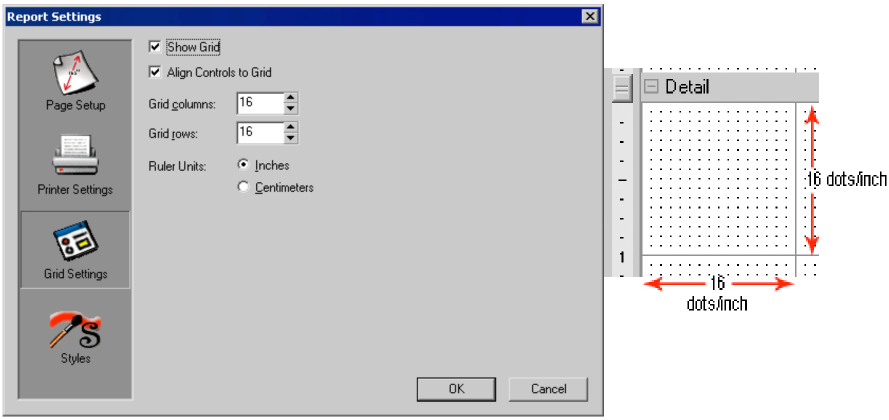
Field Name	Description
Paper Size	This drop-down list shows the paper sizes your default printer can handle. It is best to view your selection and set this option before you create a report to ensure that your report falls inside the boundaries of your printed page. Most printers have default margins or nonprintable edges. Consult your printer manual for these settings.

Field Name	Description
Width and Height	Width and height are specified in twips. Divide this value by 1440 to convert to inches; divide by 567 to convert to centimeters.
Orientation	If you select Printer Default, check this setting in your Printer control panel. The other settings are Portrait and Landscape. In portrait orientation, the page is oriented vertically; in landscape it is oriented horizontally. When you change these settings, the page preview icon will change to give you a visual representation of the result.
Collate	Select Collate when you are printing several copies of a multi-page report to print each report sequentially. When Don't Collate is selected, all copies of page 1 will be printed, then all copies of page 2, and so on.
Duplex	If your printer offers duplex printing, you can choose this option to print automatically on both sides of the paper. Not all documents need to be printed in this way, so we have included this setting to be activated only when printing reports.
Paper Bin	If your printer has more than one paper bin, you can use this option to select whatever available paper bin you prefer. You might use this option to print on paper of a different size than the printer's default, or to print on letterhead as opposed to blank paper.

Grid Settings

The tiny dots you see evenly distributed over the designer canvas are the grid, which is intended to give you guidance in the design and layout of your report. The dots will not appear on your printed report.

The spacing of the dots in rows and columns is defined under **Grid Settings**. By default, there are 16 dots to the inch both horizontally and vertically.



By default, the **Show Grid** checkbox is checked. Uncheck this box to hide the grid. Check the **Align Controls to Grid** checkbox if you want the elements on the designer canvas to snap to the grid.

Note: Sometimes you may want to uncheck this option to position elements closer together than your grid will allow. Don't forget to recheck this option afterward.

Grid settings can be changed to suit your needs. Use the **Grid columns** and **Grid rows** fields to specify how many dots per ruler unit are desired; use the **Ruler Units** radio buttons to specify inches or centimeters as you prefer.

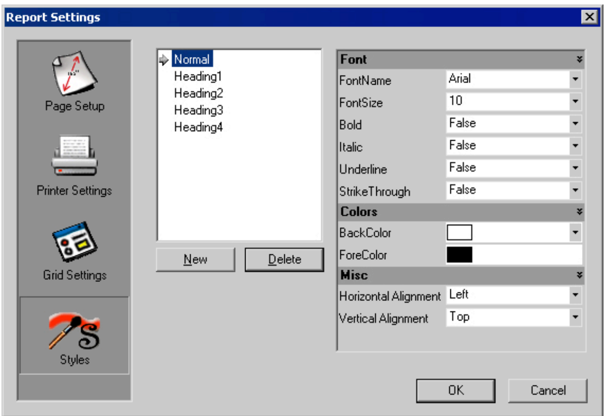
Note: If you change your grid unit to centimeters, you may want to reduce the number of dots per ruler unit to 10 or even 5 to keep your canvas from being overcrowded with grid dots.

Styles

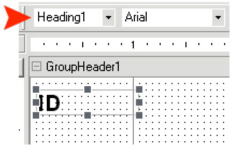
This feature gives you a quick way to style the type in your reports appropriately and uniformly. Four basic styles are included for your convenience: **Normal, Heading 1, Heading 2,** and **Heading 3.** Each of these styles has different attributes according to how they might be used in a document; for instance, the heading styles are all bold for emphasis, while the style **Normal** is plain rather than bold and of a suitable size for body text on a page. You might want to style the most important elements in a report **Heading 1,** less important headings **Heading 2,** the least important headings **Heading 3,** and body copy **Normal.**

You may use the controls in the right-hand pane of the **Styles** window to modify the font, size, color, or alignment of a style. You may also create new styles by clicking the **New** button under the list of styles in the **Styles** window.

Note: New styles, or modifications to existing styles, in a given report appear *only* in that report.

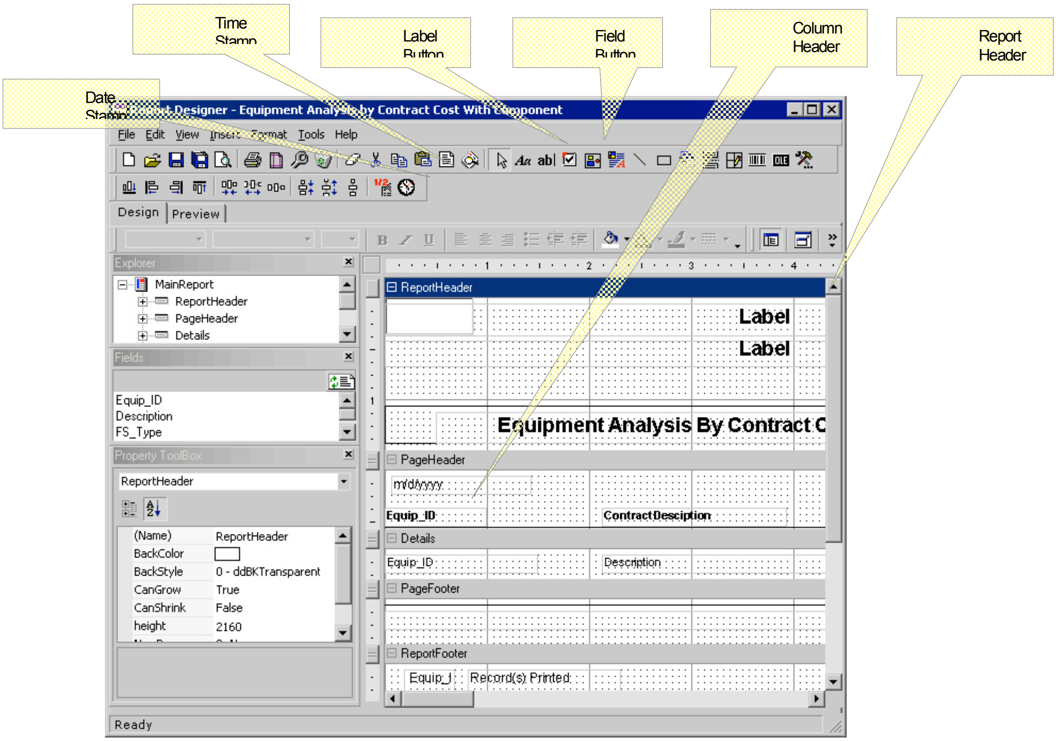


To apply a text style to an element in the designer canvas, select it, then choose the desired style from the drop-down list at the top left of the window just above the ruler.



Completing Your Report Layout

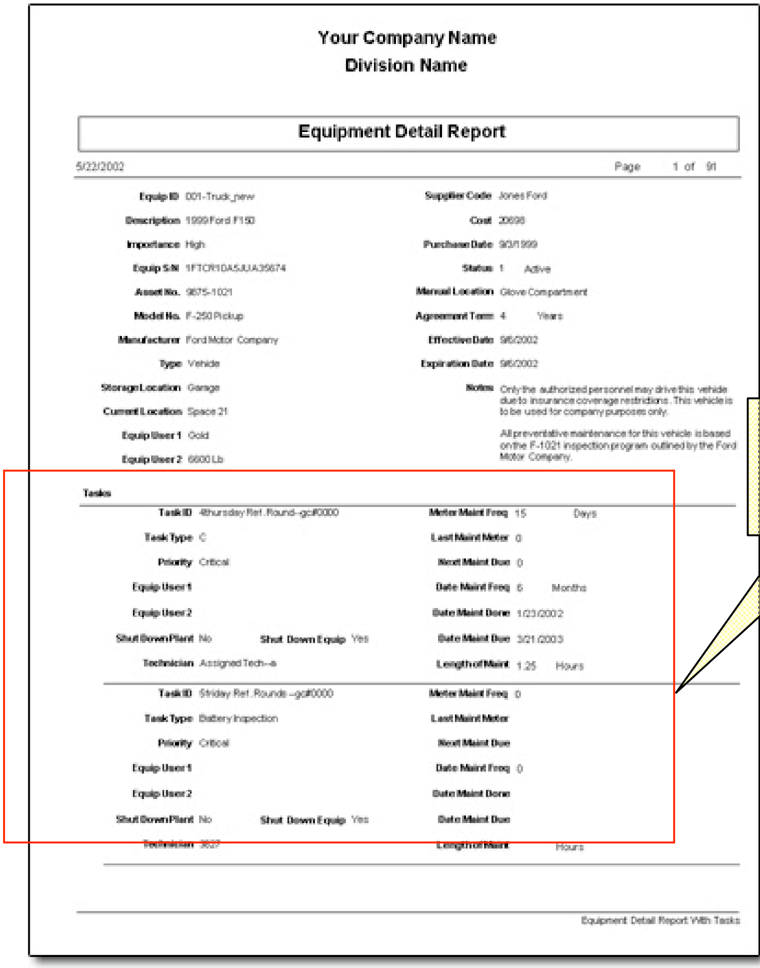
Every report must have a page header and footer. The page header usually contains the report title and the title of the columns. The footer usually contains the page number. You can create titles using the label button; the report editor also includes buttons that generate automatic page numbers and a date-time stamp. Click the desired button. A field containing the pertinent information will appear on the design canvas; drag it wherever you want that information to appear. **Don't forget to save your report!**



The other buttons are self-explanatory; we will discuss the other special buttons in greater detail as we go along. Feel free to explore.

Sub-Reports

A sub-report is a report within a report– each sub-report pertains to a record in the main report. Sub-reports are very handy when you want to include details into your report but cannot include additional tables for the details in the main SQL statement.



Sub-report of procedures attached to each equipment record.

A great deal of planning is needed when building reports and considering the addition of sub-reports. Sometimes you can include the data in your master data source (SQL Query) and just create sub-groups for this data. However, when your report format requires large amounts of detail, as in our example on the left, sub-reports can be designed separately and then linked to your main report.

Link fields are very critical. They must be of the same type–they may not have the same name but should have the same content. However, here we have made sure that fields of the same name have the same type of data. Also, primary key fields (common fields with unique values, used to link tables) must have the same kind of content.

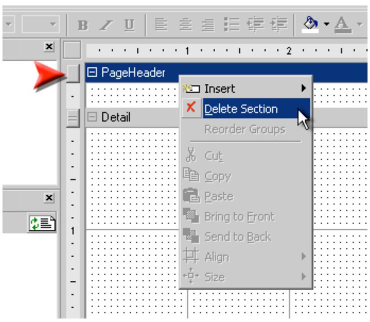
To change a property such as font style in several elements at the same time, select them by clicking your mouse and dragging across the canvas, or click on the items one at a time while holding down the CTRL key. Then change the formatting as you wish.

Sub-reports are designed in a separate design canvas and then linked into the main report document. You must make sure that it contains a least one field that is common with the table you are linking it to (contents and type). The beauty of sub-reports is that they can be used over and over again in different reports, so what you design once can be used many times.

Creating a Sub-Report

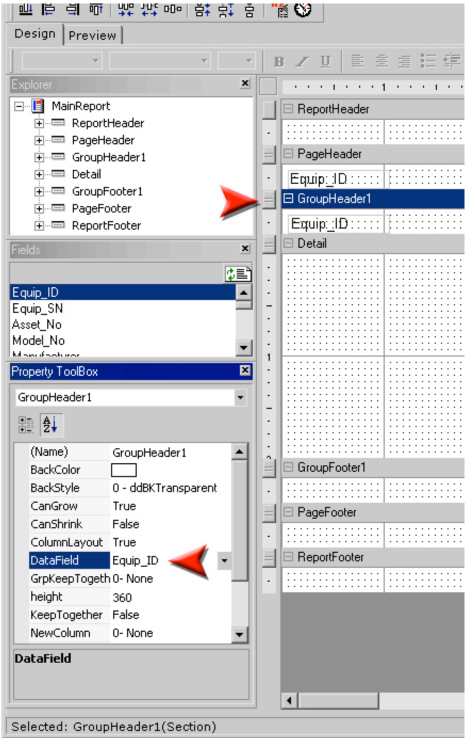
Creating sub-reports is much like creating any other report: click on **Custom Reports** under **Setup**, then click on the **Create New Report** button to view the template list in **Select Report Templates.** Select **Blank Report** and click on **OK**. A new blank report designer canvas is now ready for your report. Open a data source as described in *Opening a Data Source* on page 329.

After setting the data source, remove the page header; it is not needed in a sub-report because it should already be present in the main report. To do this, select the **Page Header** title bar, right-click, and choose **Delete Selection** from the popup menu that appears.



Only the **Details** section will remain; this is where the fields for the contents of the report will go.

Now you need a group heading. The data field you use for this heading should be the field that you use to link with the master report. It is not necessary to reflect the content of the data field in the heading but you must make sure to set the **DataField** in the **Property ToolBox** into the link field.



You can add more groups to this report, but make sure that the topmost group contains the link field.

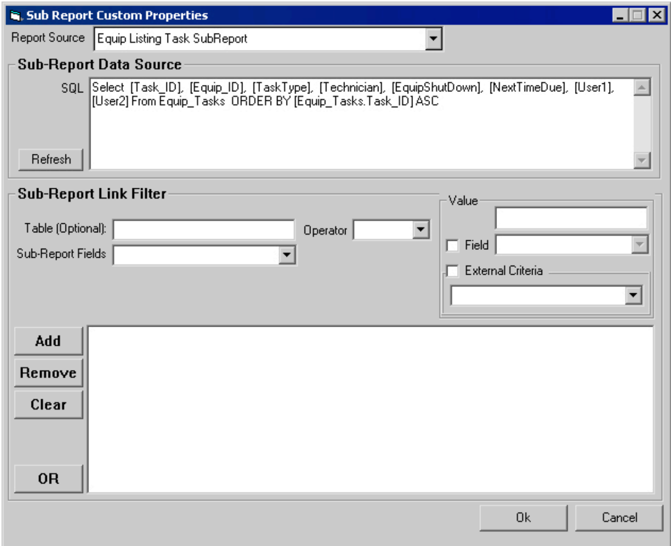
When you are done, save the sub-report with an appropriate name. We suggest that you indicate within the name that this is a sub-report, since it will not have its own page header.

Adding a Sub-Report

To add a sub-report, click on the **SubReport** button on the button bar , then drag the cursor across the canvas while holding down the left mouse button to form a rectangle that will be occupied by your sub-report.

Now that you have created a container for your sub-report, you must edit the link to the sub-report you created earlier. Click on the **Edit Sub-Report Link** button  to open the **Sub-Report Custom Properties** window.

First, you must define the **Report Source,** or the name of the sub-report that has been pre-defined.



After selecting the source, you will be able to view the SQL statement that opens the data source of the report. You must now create the link filter to connect the sub-report to the main report. To do so, follow these steps:

1. Select a field from the sub-report to link to.
2. If more than one table in the data source contains this field, you must specify the table name.
3. Select the operator to use in comparing the fields.
4. Indicate the value you wish to filter to. You have 3 choices for this:
   a. A specified fixed value
   b. Link to the current field value of the master report
   c. An external criterion is indicated by the contents of a field in the sub-report.
5. Add the criteria to the list.
6. If you need more than one criterion, repeat the first five steps using a statement connector–the default is "AND". If you wish to use "OR" click on the "OR" button before creating another criterion.
7. When you are done, click OK. To discard, click Cancel.

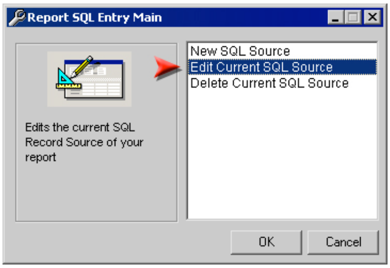
The fields of the **Sub-Report Custom Properties** window are described in the following table:

Field Name	Description
Report Source	This is a drop-down list of all available reports. Select the sub-report you will use from the list.
SQL	The SQL statement used in opening the data source of your sub-report. This is a non-editable field and is provided here so you can immediately see the tables and fields that are used in your sub-report. This is particularly helpful in finding out if the field you need to use for the link is contained only in one table or more than one.
Refresh button	Refreshes the SQL screen
Table (optional)	If your link field is contained in more than one table in your source, you must specify the table to use for your field. If only one source table uses this field, you may leave the *Table* field blank.
Sub-Report Fields	The name of the link field from your sub-report
Operator	The operator for comparing the link field to a value
Value	You have three choices for filter value: *Fixed value*–your report will be limited to only the value *Field*–this drop-down list is taken from all the available fields of your master report *External*
Add, Remove and Clear Buttons	Click the *Add* button to add a criterion. Select a criterion from the list and click on *Remove* to delete the selected criterion. The *Clear* button deletes all criteria.
Or Button	By default, criteria are linked with the "AND" connector. Select the *Or* button before adding a criterion to use "OR" instead of "AND".
Ok button	Click *OK* to apply the changes you have made to your criteria.
Cancel Button	Click *Cancel* to discard the changes you have made to your criteria.

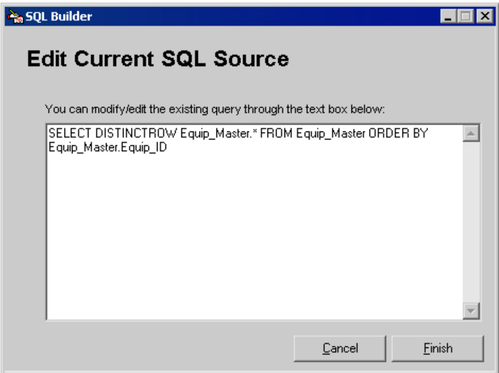
Adding a Bar Code

Bar codes of Equip IDs can be created by adding the terminator character * at the beginning and end of the Equip ID and formatting the resulting character string in a bar code font. Since the Equip IDs are taken directly from the field data, it's easy to do this automatically to all your Equip IDs without altering your database. One way to do this is to modify the SQL statement for your data source and add a new field containing the terminator characters and the Equip ID field, giving it an alias such as **BCode.**

Use the **Set or Build SQL Source for the Report** button on the button bar and select the **Edit Current SQL Source** from the selection list to open the **SQL Builder** window.

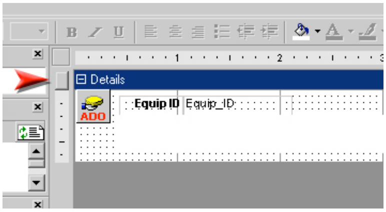


Now, you can directly modify the SQL statement for the source in the edit field as shown below:

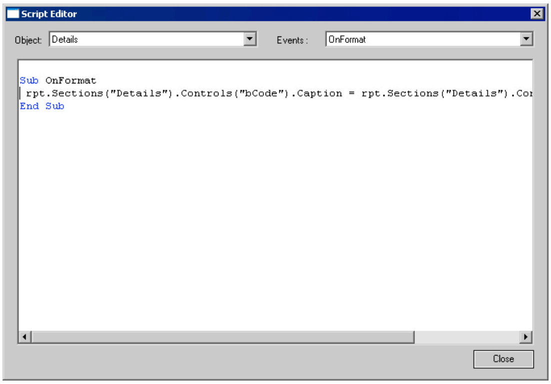


In the above example, after including all the fields from the table **tbMaster**, another field is added. The part of the statement '*'+ms_code+'*'as BCode... contains the + symbol (also known as the concatenator symbol), adds the * symbol at the beginning and end of the code, and then applies the alias BCode. This new field name is now included in the **Fields** window.

To add a bar code to the report, first click on the **Bar Code** button and drag a rectangle area in the report field where you wish to put your bar code. Now click on the title bar of the part of your canvas where you placed your bar code. In this case, select the **Detail** bar.



Currently there is only one way of linking the bar code item to the bar code field "Bcode" you created. Click on the **View Script** button  to open the script window.



If you want to use a numeric field for your barcode, use the "&" instead of the "+" sign.

```
"*" & ms_id & "*"
```

The "&" converts the value of the numeric field into string so it can concatenate properly with the two "*".

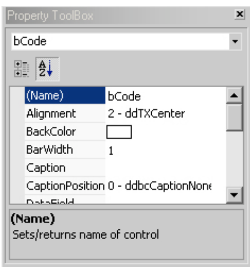
Follow the syntax below to set up your script for linking the barcode to the barcode field:

```
Sub OnFormat

  rpt.Sections("Details").Controls("bCode").Caption =
  rpt.Sections("Details").Controls("fldCode").Text

End Sub
```

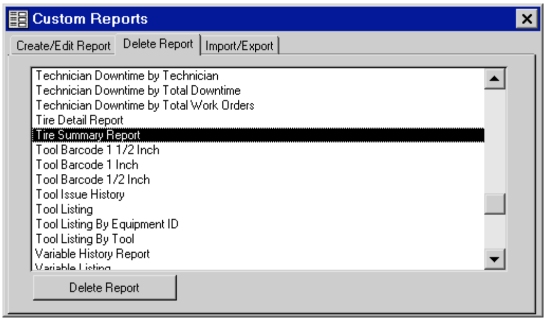
Here, "bCode" is the name of the barcode field you created in your report and "fldCode" is the data field you created in setting up your data source. This is VBScript. Just copy the script and remember to keep the lines 2, 3 and 4 together or in one row (between Sub and End Sub). The line has been divided into 3 parts for illustration purposes only, to fit within the page margins.



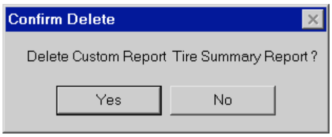
In "`rpt.Sections(2)`", 2 is the index number of the *Detail* Section. You can use "`rpt.Sections("Details")`" (replacing "2" with "Details"). The double quotes are necessary for *Strings* in the statement. In our example you start with 0 from the top most section so *Details* will be section 2. The same holds for the *Controls* since you do not know the index number of the barcode control you created; you can just include the name of the control enclosed in double quotes. (`Controls("Field10")`)

Delete Report

To delete a report from your database, click on the **Custom Reports** button in **Setup**, then click on the **Delete Report** tab. A window similar to the one below will appear:



Select the report you wish to delete, then click on the **Delete Report** button. A confirmation message will appear.



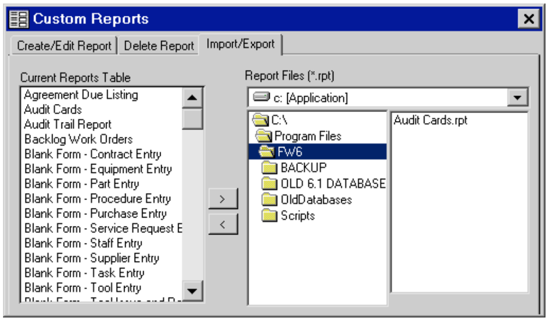
Click **Yes** to confirm that you want to delete the report and the report will be deleted from your FaciliWorks database.

Note: You cannot undo deletion of a report.

Import/Export

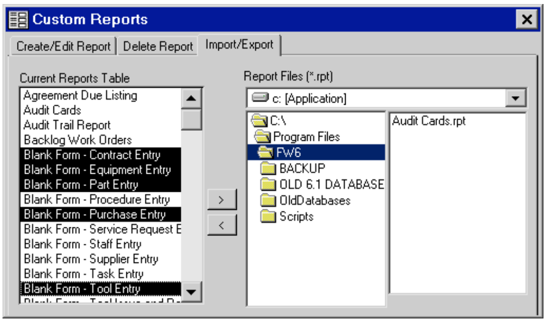
This utility lets you import and export custom reports. FaciliWorks saves encrypted reports in the .RPT format.

To import or export a report, select the **Import/Export tab** in the **Custom Reports** window.

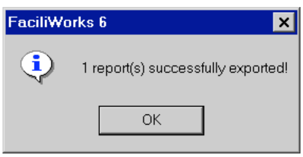


Exporting Reports

To export reports, select one or more reports from the **Current Reports Table** listing as shown below, then use the file browser on the right-hand side of the window to choose where you wish to save the new reports. Once you have done this, click on the → button to export the report(s). Each selected report will be saved as a separate file.



A dialog box will appear, confirming that your report has been exported.

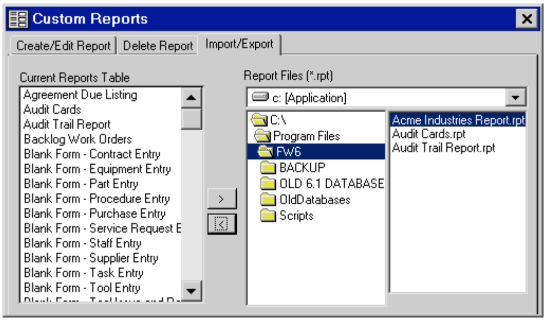


Exporting to an Existing File

To export to an existing file, select the destination file from the list box on the right before you click on the → button to export the file. You cannot export multiple reports to a single file.

Importing Report Data

To import reports, use the file browser on the right-hand side of the window to select the reports you wish to import. Once you have done this, click on the ← button to import the report(s).



Appendix A: Database Management

Create a New Data File

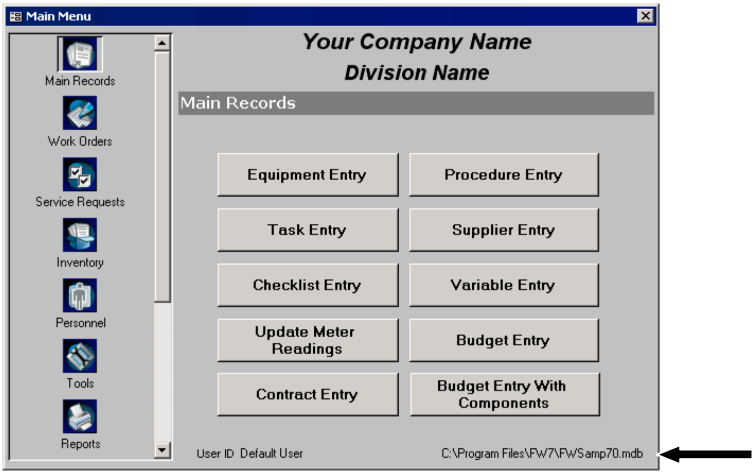
FaciliWorks includes an empty database, identical in structure to the FWDATA70.MDB, to allow you to use multiple equipment databases. You can copy the empty FaciliWorks database file and give it a different name. The settings and users that you entered for your current database will also be copied to your new database.

Before you create a new data file, you may want to create a new directory in which to store your new database file. Use **Windows Explorer** to create the new directory. You can name your directory to identify which FWDATA70.MDB file it contains, such as "PLANT5", "STAMPING", "REFRIG", or by the name of a customer or an equipment supplier. For example, your directory name could be a plant location. Your database file paths would look like this:

C:\PROGRAM FILES\FW6\CHICAGO\FWDATA70.MDB
C:\PROGRAM FILES\FW6\MIAMI\FWDATA70.MDB
C:\PROGRAM FILES\FW6\SEATTLE\FWDATA70.MDB

After you have created your new database, open FaciliWorks, stay in the Main Menu, then select **File | Open Database.** Use the **Browse** button to navigate to your new directory, which contains the second FWDATA70.MDB file, then click the **OK** button.

The database file that you are currently using is displayed in the lower right portion of the Main Menu, as shown here:



FaciliWorks will remember which database file you last opened even if you quit the program and restart it later. To open and use your original FWDATA70.MDB file, go to **Open Database** again and navigate back to your original directory (usually C:\PROGRAM FILES\FW7).

Custom Programming

If you need to keep track of additional information or need utilities not contained in FaciliWorks, you may be able to add these features with CyberMetrics' custom programming services. We can also modify any of the FaciliWorks reports or create new reports based on your individual needs. One of our programmers will evaluate your request for custom programming services, and we will give you a quotation based on hourly rates. For more information, contact CyberMetrics Corporation or your distributor.

Network Installation

Before you install FaciliWorks on a network, you must be familiar with the network policies for file and program locations, and you must be certain that all users have full rights (create, change, and delete rights) for the appropriate files and directories. You must also have a network license of the FaciliWorks software.

Normally, you must install the FaciliWorks software to each workstation that will use the program. For maximum performance of FaciliWorks with multiple users, we

recommend installation of FaciliWorks program files on each local workstation with a shared database file (FWDATA70.MDB) on your server.

Windows Located on Each Local Workstation

Typically, each user on a network runs Windows from their local workstation's hard drive. You must install FaciliWorks on that local workstation and on every other workstation in the network where it will be used.

Installing FaciliWorks onto one workstation and simply copying the files from the network to another workstation **will not work.** FaciliWorks' setup program needs to register entries in the Windows Registry, update out-of-date DLL files and font files, create icons, and perform other setup tasks. However, to make things easier, you may copy the contents of the program CD to a designated network directory and have each workstation run the installation program SETUP.EXE from the network. For example, you could copy the FaciliWorks CD to the network server directory F:\FSSETUP, then instruct your FaciliWorks users to run the SETUP.EXE file located in F:\FSSETUP.

Windows Run from the Server ("Served Copy of Windows")

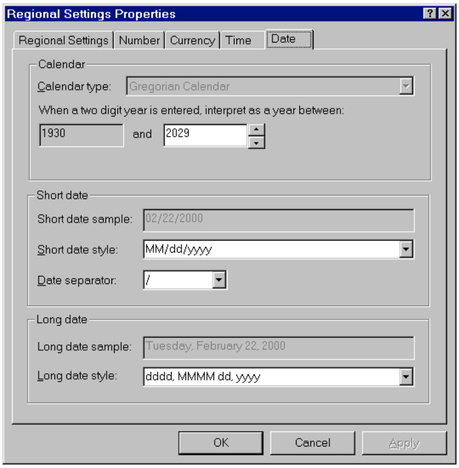
If your network is set up so that Windows is located and run *exclusively* from your network server, then you may install and run FaciliWorks on the server. However, whoever installs FaciliWorks to the server must be a supervisor with full rights to the shared Windows Registry and the shared Windows DLL files. FaciliWorks will run slowly in this configuration since both the program *and* data must be delivered to the user workstation via the network cable.

Appendix B: System Maintenance and Troubleshooting

Date Formats

FaciliWorks supports all available numeric date formats within Windows and has been designed to support dates beyond the year 2000. For example, you can represent the date of "November 1, 2002" as 11/1/2002, 2002/1/11, or 2002/11/1, depending on your preference.

You may want to verify your date settings in **Windows Control Panel**. Choose **Start | Settings | Control Panel,** then open **Regional Settings** and click on the **Date** tab. The date formats that you enter into FaciliWorks *must match* the Windows international date setting; otherwise, errors will occur while you're running the program. Shown below is the most popular format used in the United States:



Work Order Entry: Set Up COM Port

Page Tech Button

FaciliWorks' **Work Order Entry** screen includes a button that you can use to page a technician for that work order. The first time you click this button, you'll see a message screen that will ask which COM Port you are using to page the technician. You may select or enter COM1, COM2, COM3, or COM4, depending on your hardware.

Maintaining Your Hard Drive

Windows includes two utilities to keep your hard disk running smoothly. Run **ScanDisk** each week to cleanup cross-linked files and other problems. Next, run **Disk Defragmenter** to defragment your files (this keeps your files from being spread out in pieces over the hard drive). Your disk accesses will run somewhat faster, and your hard drive will be less prone to problems.

To run either of these programs, close all of your open applications. Then, from your **Start** button, select **Programs**. Choose **Accessories** and click on **System Tools.** Next, select either **ScanDisk** or **Disk Defragmenter**.

Maximizing Your Performance

If you have limited resources, and FaciliWorks runs slowly, try closing all other applications to devote all of your available system resources to FaciliWorks.

Installation Fails

Try installing the program CD a second time. If the installation fails again, write down whatever error messages you see and call Technical Support at (480) 922-7300.

Repairing Data Files

Although FaciliWorks has been designed to be as trouble-free as possible, there are occasions when error messages may appear because of power outages, accidental resetting of your computer, network disconnects, and other mishaps. In these cases, you may need to repair and compact your data file (FWDATA70.MDB). You can do this by selecting **Compact/Repair Data** from the **Data Tools** menu. If you use multiple databases, you must compact each database individually. Depending on the size of your file, this utility may take several minutes to finish working.

Important: Network users should make sure that no one else is running FaciliWorks while someone is performing this operation.

If the error messages persist, contact Technical Support immediately at (480) 922-7300 for additional instructions.

Duplicate Value—Error Message

An error message similar to the one shown below may appear if a user tries to enter two records with the same key field values.

This message will appear if you:

- enter two equipment records with the same equipment ID;
- enter two tasks with the same name, for the same equipment;
- attach two procedures with the same procedure name to the same task;
- enter two tool records with the same tool ID;

- enter two supplier records with the same supplier code;
- enter two procedures with the same procedure name; or
- enter two parts with the same part number.

If this message appears, click **OK**, then click the **Undo** button or choose the **Undo** command from the **Edit** menu. You can also press the **ESC** key to remove your duplicate entry.

Appendix C: Training

CyberMetrics Corporation offers FaciliWorks training workshops regularly throughout the year. This two-day, hands-on training workshop will take you step-by-step through planning, preparation, set up, and successful operation of the FaciliWorks maintenance software. You'll learn to save time, avoid common mistakes, and maximize the use of your program. You'll also learn about advanced topics, such as data filtering, system maintenance, system security, performance tuning, and more.

We keep our class sizes small in order to provide individualized instruction and assistance. Attendees will receive a workbook detailing all of the training topics presented in the workshop.

We encourage anyone involved in the implementation or use of FaciliWorks Maintenance Management Software to attend.

On-site training classes are also available. For more information about our training program or to make your reservation, please contact CyberMetrics Corporation or your distributor.

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